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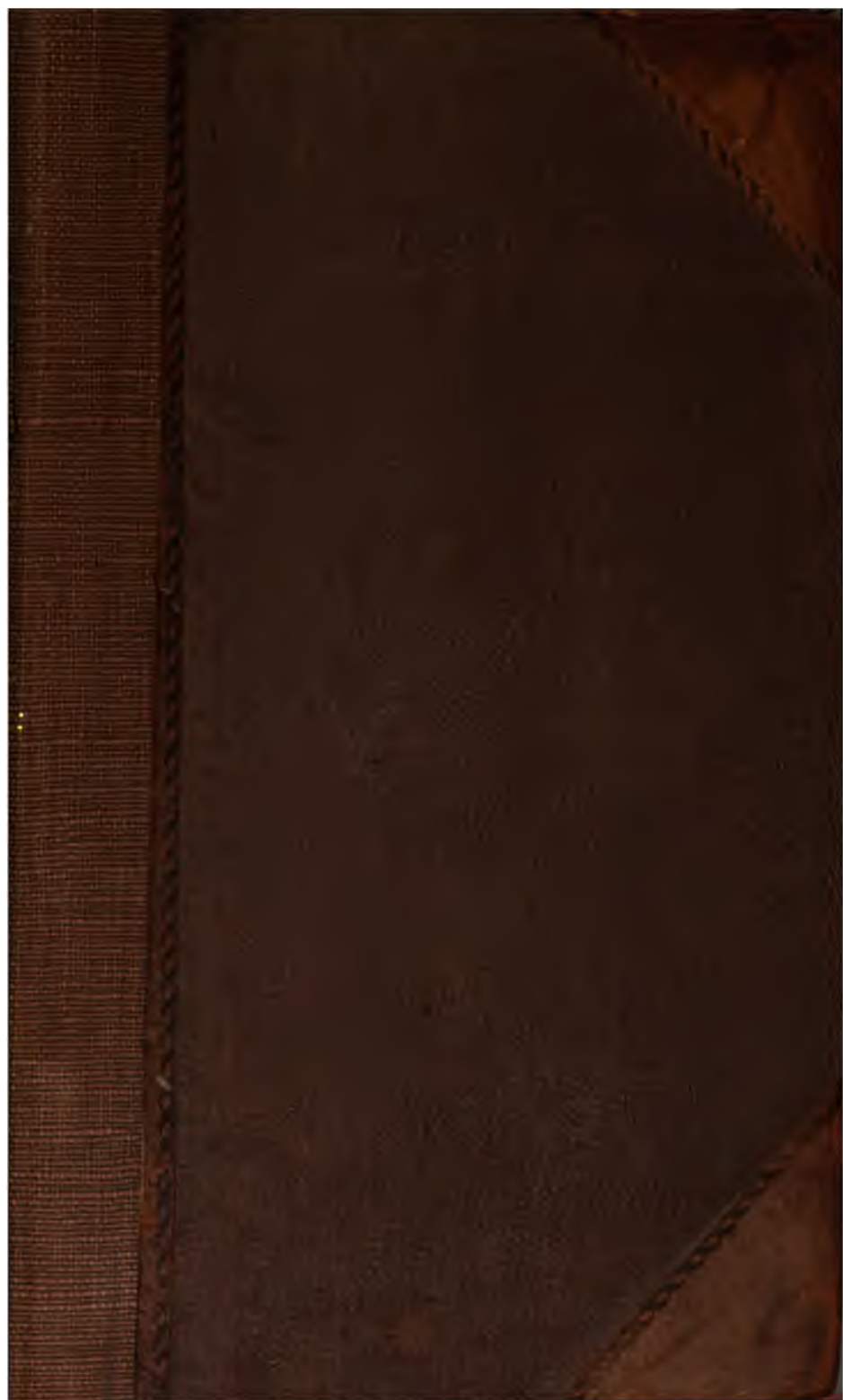
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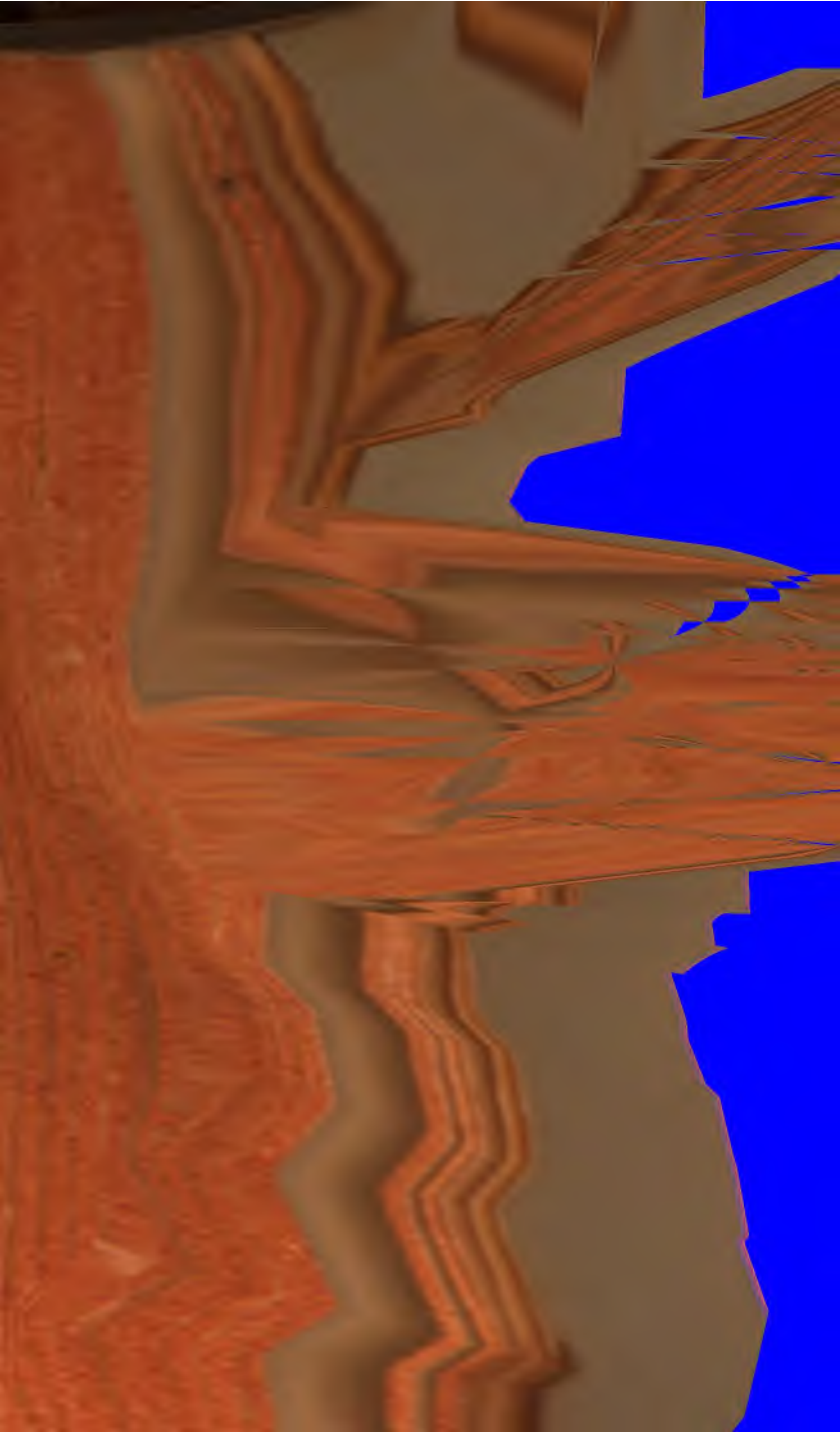
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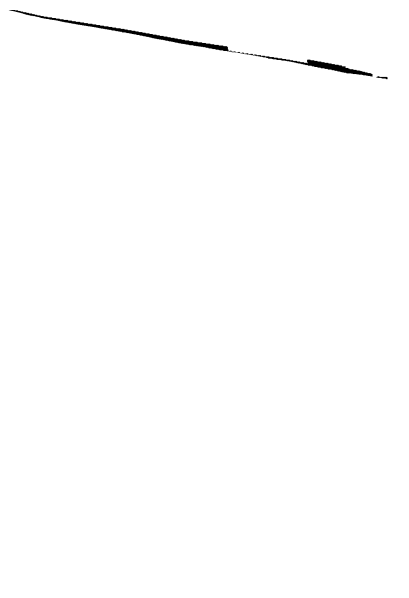
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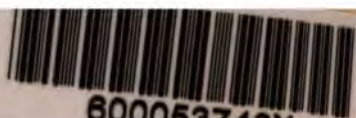
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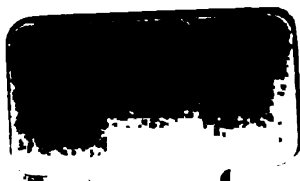


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*Portrait of a Member of the House of Commons
 seated in the Hon. E. M. Dock Yard at Bombay*

Painted by A. V. Allen & Co. Leadenhall Street April 1847

JOURNAL
OF
A RESIDENCE OF TWO YEARS AND A HALF
IN
GREAT BRITAIN;
BY
JEHANGEER NOWROJEE
AND
HIRJEEBHOY MERWANJEE,
OF BOMBAY,
NAVAL ARCHITECTS.

23



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DEDICATION.

TO

SIR CHARLES FORBES, BART., &c. &c.

SIR,

During our residence of two years and a half in Great Britain, we have, from the day of our landing up to the present time, received innumerable acts of kindness, attention, and friendship from you. Your valuable advice upon all occasions has proved of the greatest advantage to us, and the interest and anxiety you have evinced for our welfare, has far exceeded our most sanguine expectations.

Your unwearied exertions for our country and her children, are too well known to need any comment from us, but your uniform and never-ceasing attachment to the Lowjee Family, of which we are members, deserves our most grateful public acknowledgments.

Your first contracted friendship was with our

grandfathers, then with our fathers, and latterly with ourselves. Thus you have through three successive generations preserved *that* friendship with the *same* warmth of heart, and with the *same* disinterested motives.

Allow us, therefore, Sir, respectfully to dedicate to you this brief and unpretending volume, which is the result of our sojourn in this country, as a slight token of our gratitude ; and with sentiments of respect and esteem, we have the honour and gratification to subscribe ourselves,

Sir,

Your most grateful and

obliged humble servants,

JEHANGEER NOWROJEE.

HIRJEEBHOY MERWANJEE.

London, April, 1841.

PREFACE.

DURING our residence in England we have been so often asked our motives for leaving our homes and placing ourselves under instructions in ship-building at Chatham, that we have deemed it expedient to draw up a brief account of our actuating motives, and also to exhibit a faint outline of those things, which we had an opportunity of witnessing during the limited time that we allowed ourselves for recreation, and to give a little repose to our minds. We considered that keeping the bow always bent would only tend to weaken it, but we were careful in our hours of relaxation to visit such exhibitions, and to associate with such people, as would instruct while they amused, and of which the following pages contain the result.

It has not been our intention to journalize our proceedings or to describe things in the order that we saw them, but we have endeavoured to place before the reader a sort of bird's eye view, as it were, of what we have seen from the 29th of March, 1838, the day we left Bombay, until the

middle of April, 1841, when we cease this compilation, being about to return to that place.

First, then, as to our actuating motive, there are two of us, Jehangeer Nowrojee, the son, and Hirjeebhoy Merwanjee, the nephew, of Nowrojee Jamsetjee, Esq., the present master builder in the Honourable East India Company's dock yard at Bombay, and we are grandsons of Jamsetjee Bomanjee, who was also for years master builder of that yard. We were both educated with a view to being brought up in the profession of our forefathers, and were attached at an early age to the Bombay dock yard, which was founded by our progenitor, Lowjee Nasserwanjee, in the year 1735, and after whom our family is called, viz., "Lowjee Family." It is necessary to state that before the above named year all vessels were built at Surat, the principal commercial city on the western side of India. The Bombay government having contracted with a Parsee builder there in the same year, to build a ship, which was called the "Queen," Lowjee superintended this vessel in the capacity of a foreman, and Mr. Dudley, who was sent to Surat by the government of Bombay to see her properly built, was so much pleased and struck with the attention and ingenuity of the foreman, that he persuaded him to accompany him to Bombay, in order to establish a building yard there. To

this he consented, and having brought twelve or fourteen shipwrights with him, selected the present spot for the dock yard, and thus laid the foundation of that establishment, which now is considered the finest naval arsenal in India, and that period may be considered an era in the history of Bombay, as the prosperity of the island began rapidly to increase, and in little more than a century the place, formerly an insignificant and small island, now ranks amongst the cities of Hindoostan, and promises to become one of the best in India.

Lowjee afterwards brought up his two sons Manockjee and Bomanjee to his own profession, who each had a family of four sons, some of whom were also brought up as shipwrights, but Jamsetjee, the son of the latter, built the largest and the first ship for the British navy, the "*Minden*," of seventy-four guns, and afterwards six other ships of the line. He was well known as a naval architect to all naval commanders, and men that went to India; and his own as well as his predecessor's services have frequently called forth the testimony of the Honourable East India Company and the Boards of Admiralty, from whom he had from time to time received numerous marks of approbation.

The present master builder has also built

several ships for the navy, namely, the *Asia*, *Bombay*, and *Calcutta*, all of eighty-four guns, and which are acknowledged to be the finest and strongest two-deckers in the world.

There have been in the whole ten ships of the line, several frigates and smaller vessels ; and numerous other vessels for the Hon. Company and the merchants of India have been built at Bombay, besides the defects of Indian squadrons under several eminent admirals have been repaired, and in fact the dock yard may be the just boast of the Honourable Company, for the advantages and prosperity it has afforded to the commerce of Bombay. Several members of the Lowjee Family have distinguished themselves in other points, Hormasjee Bomanjee was well known in India and England for his commercial enterprise ; and the extensive trade he carried on, in conjunction with the celebrated house of Forbes and Co. (the oldest in Bombay), tended much to benefit Bombay by paving the way for others. Pestonjee Bomanjee was also a partner in the well known firm of Bruce, Fawcett, and Co., now Remington and Co.

Nasserwanjee Manockjee, also a member of the same family, encouraged French commerce, and his son, Jehangeer Nasserwanjee carries on the same business. Almost all French

ships that come to Bombay are consigned to him, as also French ships of war, and the creditable and regular manner in which he conducts the business, has excited the approbation of his Majesty, the King of the French, who sent him a very handsome present of a gold medal, and deputed the celebrated Marshal Soult to write to him and to say that it was a special mark of the King's favour. In addition to this, he has the American ships consigned to him, so that it may not be presumptuous to state that our family has been very instrumental in promoting the commerce and the prosperity of Bombay.

We ourselves are the fifth generation from Lowjee that continue to serve the Honourable East India Company, with fidelity and attachment, through a period of one hundred and six years as ship builders. But we heard much of the progress making by that giant Steam; we found that it was becoming more extensively applied to marine purposes; that instead of its being only used for inland navigation and short distance, vessels were sent to Bombay to keep up the communication between India and England; we were informed that vessels of immense tonnage were designed to cross the Atlantic, and that steamers were applied to purposes of war; that, indeed, there appeared to be no bounds to the mighty strides that it was

taking from the applicability of steam as a propelling power to ships of all sizes.

The Head Builder was, therefore, advised by many of his friends that though as constructors and builders of ships, himself and his ancestors were highly complimented for their skill and ability, yet a new era had arrived when the attention of scientific men must be turned to *that* form of a body, which was to be rapidly propelled through water by wheels, instead of by the power of wind and canvass, and that he should, therefore, send two or three young men to England, where steam vessels of all descriptions were being designed,—from a small river boat to those magnificent passage vessels employed in crossing the Atlantic, and those still more noble fabrics constructed in the several royal yards for the conveyance of mails, and also those destined for “men of war.”

Among the friends that thus advised him the foremost was John Seppings, Esq., surveyor of shipping to the Honourable East India Company at Calcutta, who had come to Bombay in February, 1838, to return to England by the overland route, he strongly urged the necessity of taking such a step in order that Bombay dock yard should keep pace with the improvements of the day, and being an eminent naval architect himself gave the head builder the assurance

of our having every opportunity of perfecting ourselves in that branch of naval architecture in England.

Having been encouraged by Mr. Seppings, and hearing the same thing from the then worthy superintendent, Rear-Admiral Sir Charles Malcolm, he at once applied to the government for sending two of us to this country. Government approved of the measure, and very kindly promised to recommend us to the notice of the Honourable Court of Directors of the East India Company.

To these two sincere advisers of our Father and Uncle we owe every thing, they were actuated by the best of motives, and a disinterested anxiety for our welfare, which we shall never forget. It was through Sir Charles Malcolm and Mr. Seppings that we have had the good fortune of coming to England, and we here beg to convey to them our best thanks and grateful feelings for it, as well as for the kindness and attention we subsequently received from them in England.

With the specific object, therefore, of acquiring a correct knowledge of the construction of steam vessels and ships, we left our relatives and friends at Bombay, and embarked on the 29th of March, 1838, on board the Buckinghamshire, with our friend and preceptor, Dorabjee Muncherjee, and two servants of our own caste. We

have spent a large sum of money upon our maintenance and education, and we humbly hope that our residence in this country has been attended with the desired result.

We had the opportunity of daily visiting Chatham dock yard, where large steamers were being built, by the kind permission of the Lords of the Admiralty, to whom we feel most grateful. We have availed ourselves of the able instruction of John Fincham, Esq., the talented master shipwright of Chatham dock yard, who was for many years the superintendent of the school of naval architecture at Portsmouth, and who is also the author of several works on ship building ; to him we feel particularly indebted for the information that he imparted to us.

We have also to acknowledge the uniform kind disposition shown to us by *all* the officers of that as well as other royal yards that we have visited. We more particularly allude to Richard Blake, Esq., master shipwright of Portsmouth yard, and T. Hawkes, Esq., master shipwright of Plymouth yard. It would be invidious to name others, as we here publicly acknowledge our thanks to all from whom we asked for information, and we may state without vanity that we have made such progress as to enable several of our professional friends to give us testimonials so strongly worded as amply to compensate for our

long separation from our families, friends, and country.

Language will not express the gratitude we owe to the Honourable Court of Directors of the East India Company, particularly their two late, and the present Honourable Chairman, Sir James Law Lushington, Sir Richard Jenkins, and William Butterworth Bayley, Esq., also the worthy Secretary, James Cosmo Melville, Esq., and J. C. Mason, Esq., of the Marine department, for the uniform kindness, patronage, and liberal encouragement we received from them officially, and the zeal and disinterestedness which they evinced for our welfare, in return for which we can only offer the assurance of earnest and indefatigable attention to our duties in India.

To our worthy patron, Sir Charles Forbes, we feel highly obliged, and we cannot sufficiently express ourselves in acknowledging his numerous acts of patronage, sound advice, and real friendship, not only towards us, but to the family to which we belong, and the paternal care with which he watched over our studies, movements, comforts, &c., during our residence here, and we must take the liberty of referring our readers to that part of our work where we have expressed our gratitude to him and his family, but which we consider not at all adequate to the good-will he entertains towards our countrymen

generally, and his unceasing exertions for promoting their welfare and happiness.

We must not forget our worthy and able instructor, the Rev. George Hopkins, of Egham, in whom, during our stay of twelve months under his superintendence, we found not only an instructor, but a very sincere and disinterested friend, alike anxious for our acquirements, health, and comfort, and it is justice to him that we must with pleasure state, that though himself a clergyman of the Church of England, he never upon any one occasion condemned or ridiculed that, to us dearest of all, the religion of our forefathers; on the contrary, he, to his honour be it spoken, evinced considerable anxiety that we should persevere and act up to what we firmly thought and believed to be true. It is to him that we are mainly indebted for the success we have had in studying our profession at Chatham, as we read the writers on naval architecture with ease and profit, in consequence of the preparatory instructions we received from him. It is also due to the sound knowledge he imparted to us in the limited time of twelve months that we have been able to compile this volume, we shall, therefore, always recollect him with feelings of respect, esteem, and admiration.

To our kind friend, Captain Robert Cogan, of the Indian navy, we are much indebted for the

assistance and advice he cheerfully afforded us when we needed them, we therefore convey our thanks to him.

From Sir William Symonds, the Chief Surveyor of the Navy, and his assistant, John Edye, Esq., we have received much kindness and attention, which we shall ever gratefully recollect.

It would indeed be an endless task to enumerate here all from whom we have received courtesy in England, but the above-named gentlemen we could not consistently pass over, and we candidly acknowledge that we return to our native land deeply impressed with the hospitable and affable character of the British people, and the civilities we have experienced during our short sojourn will never be obliterated from our memory.

With regard to our observations upon the different scenes in England, we cannot imagine that they will afford either instruction or amusement to Europeans, but we do think that to the natives of India who may be about to visit England, they will prove useful, they will point out to them such things as are worth inspection, they will give them a faint idea of what those places are about which they have heard so much, and our remarks may teach them that although worshipping their Creator through a different medium, that they will in England receive much

of kindness and of courtesy, that they will see manufactories of almost every description of articles ; they will see glass made, cotton manufactured, and, congregated together for exhibition, models for performing every possible operation.

With these views, we have noted down those things, and although we may be deemed presumptuous for putting our ideas in print, we have only to hope all who read our little work will make due allowances for our want of correct English phraseology ; and we state that if upon any subject our remarks appear of erroneous construction, it must have been from want of knowing *better*, as we have no prejudice against any one, or no feeling that could in any way lead us to personalities.

We must also request indulgence for any errors, typographical or otherwise, that the reader may meet with, as the work has been hurried through the press to get it out before our departure.

In conclusion, we hope, that should our humble efforts promote and increase the existing kindly feeling towards the natives of the East in the breast of the British public, our highest ambition will be gratified, and we shall indeed think that *we have not travelled, studied, and written in vain.*

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CHAPTER I.

VOYAGE FROM BOMBAY TO ENGLAND.

ON the twenty-ninth of March the Buckinghamshire was announced to leave, and as the time drew near, we began to feel uneasy. The idea of leaving our homes, the happy island which gave us birth, the sacrifice of comforts we were about to make, and three years' absence from our wives, our parents, and relatives, made us very melancholy; however hope animated us and we reflected with what pleasure we should see them all on our return, and moreover what advantage our countrymen in Bombay would derive by our being acquainted with the resources of a country on which their life and property depended, and we hoped that it would be paving the way for them, and that by our communicating to them what we had seen of England, and her inhabitants, they would be actuated to visit her, and that by the frequent interchange of ideas and feelings much benefit would result to both.

On the morning of the twenty-ninth we bade adieu to our families and friends, and many were the tears of sorrow that flowed from all eyes at that critical hour. All were melancholy and sad ; many came on board the ship with us and remained there as long as they could, but oh ! what words can paint the grief when we thus severed from each other ?

The Captain gave orders to weigh the anchor, and the wide sails were now spread, and the noble ship stood out for sea.

Every soul on board except ourselves, and some native seamen, were full of joy, with the anticipated pleasure of seeing their native land and the associates of their younger days. Our case indeed was different, we were leaving our birth place for a strange country, and had exchanged homely comforts for the troubles of a long sea voyage. We gazed on the happy land we had just left till we could see it no longer.

We soon became reconciled to our lot and contrived means to amuse ourselves as well as we could. For three days and three nights we saw nothing but the wide ocean before, and the sky over, us.

Our fellow passengers were mostly public servants, whose names would be of very little interest, suffice it to say, that there were upwards of sixty including the children, who were about fifteen in number.

Many of the passengers were sea sick, but to the great astonishment of all, the whole of us escaped it and were totally free from the slightest symptoms of its approach ; this we attribute to be caused by the abstemious mode of living we adopted at sea. We here beg to suggest to all those, who wish to escape the unpleasant effects of sea sickness, to refrain from taking any wine or spirits, and to be moderate in their meals for the first few days, as we have found it of advantage in keeping our health, though out of us five, only one of our attendants had been to sea before.

On the fourth of April we saw the land about Cannanore, from which place we had to take some soldiers and a young officer of the Army as passengers in the ship ; in the morning of the following day we came into the Bay of Cannanore, which is said to be the best on the coast of Malabar.

The Town is defended by a fortress, and has, we were informed, some very good houses. As our ship was expected to leave the place in a few hours none of the passengers went on shore ; we saw some very neat bungalows belonging to the English, close to the beach with gardens surrounding them.

A boat was sent on shore with the second officer and the purser, with whom we had the opportunity of sending some letters to Bombay by the post.

Soon after the ship entered the Bay we were surrounded by the natives, who came with their canoes loaded with all sorts of fruit, cocoa nuts, and vegetables, which was very acceptable to us, and we purchased them with great eagerness. The boat returned in the afternoon with the passengers, and we once more made for sea.

We had to take some more passengers from Cochin, as well as our living stock, such as fowls, geese, &c., with which the coast of Malabar abounds; we sailed along the coast keeping it in view all the time. The coast between Cannanore and Cochin, is of uniform height and thickly covered with cocoa nut trees, and had altogether a very beautiful appearance.

On the morning of the tenth of April we reached Cochin, there were several small vessels in the harbour and the steamer "Semiramis," belonging to the Honourable Company. Apprehensions were entertained about her safety at Bombay when we left, because she had been more than three months on her passage from England, but we here understood that she was detained at many places on her way to take in fresh supplies of coals.

We did not come to anchor at this place, because we expected to start again in the evening; the captain fired guns to warn the passengers on shore of his arrival, in order that they might come on board during the day. Here the ship was

again hemmed in by the native canoes, containing great quantity of fruit and vegetables, in addition to which they had brought numerous parrots, and mungooses, which the sailors were very desirous to buy, and to take them to their friends as the living curiosities of this side of India, and such was the bustle and noise which prevailed in making the bargains, and so many of the crew were willing to purchase the birds, that a momentary suspension of their duties took place, and the accommodation of the ship's company was likely to become a menagerie of birds, but the Captain issued peremptory orders for the owners to leave the ship.

After breakfast we took a small canoe and went on shore; we immediately repaired to the house of a Parsee, who was a merchant and had a building yard of his own; we were very handsomely treated by his domestics, and though he was not at home, he left orders always to shew hospitality to any one of his own caste, who may happen to come there. Having taken dinner we went to our host's dock-yard to pay our respects to him and to thank him for his hospitality, but to our great regret he was not there. The town of Cochin is not very extensive and from its proximity to the Teak wood forests many building yards have been established by private individuals, and some very good ships have been built here. Cochin was ceded to the British, in the year 1814,

by the Dutch, who captured it from the Portuguese. We saw some ruins of buildings which formerly must have had an air of grandeur. Dutch, Portuguese and Jews are to be found in great numbers here. The trade is considerable in Sandal wood, Cardamums, Pepper, Cocoa nut, and Teak wood, and ample supplies of poultry can be procured at a very cheap rate, consequently ships bound for long voyages take their living stock at this place. Fowls are procurable at two rupees a dozen. Ducks three rupees per dozen. Geese from two to two rupees and a half a couple, and Turkeys from two rupees and a half to three rupees a couple.

The streets in the Town are very irregular, and the houses have a very indifferent external appearance, though many of them are commodious within.

At four in the afternoon we came to the landing place, and we saw the ship's boat, with the second mate and the purser loaded with poultry, return to the ship; they advised us to follow them as soon as possible as the ship was waiting for them.

It was more than half an hour before we could procure a boat to carry us, all of them being employed in conveying coals to the steamer; however we succeeded in getting a miserable small craft, with two men to row her; we began to be very apprehensive that the ship would have to

wait for us, but our boatmen pledged themselves to take us on board in an hour.

The canoe, as these crafts are called, was an indifferent one; they are scooped out of a solid log of wood, and are round bottomed so that the least overbalance will upset it; there were two men on the oars and one at the rudder, the wind was blowing fresh, and tide against us, so that they had hard work to pull the canoe. The sea was very high and the boat was tossed about a great deal, and we were very much frightened, and were in danger of upsetting, however we persevered in keeping our balance and in an hour reached the ship. The passengers being all on board the Captain was anxious to avail himself of the fresh breeze, and we set sail, but within an hour it was ascertained that nearly a third part of the live stock, which came on board, was dead from the effects of the salt water and by the tossing about of the gig while coming to the ship. We were consequently forced to put back for the place, and cast anchor in the road on account of a heavy squall that came on. Early next morning the gig was sent ashore with the purser and second officer to procure a further supply, and they returned to the ship at three in the afternoon. By this time the Semiramis having taken in all her coals, got her steam up and weighed anchor to leave for Bombay; she spoke to us as she passed by and we had the satisfac-

tion of sending a favourable report of all on board by her to Bombay.

At five in the afternoon we weighed anchor, and set sail, with the hope of making a speedy passage to the Cape, which was the next place we wanted to go to for replenishing provisions and water for the rest of our passage.

We were gazing on the shore till it was quite dark, and bade adieu to the fair land of Hindostan for some time to come.

Before we reached the Cape we fell in with a great many ships, exchanged colours with some, and spoke to many of them; but it would be tedious and unnecessary to enumerate them all here, however on the eighteenth of May we fell in with the barque Earl of Liverpool, we exchanged colours, and she came alongside at six in the evening; she had left Bombay a few days after us, and the news she gave us of that place was of very little importance. The following morning we saw her within a hundred yards of us, and it being a perfect calm the commanders of both ships found it an excellent opportunity of comparing their chronometers.

The Commander of the Liverpool in consequence came on board our ship after breakfast, and left after dinner; it was indeed pleasing to all on board to see a stranger at sea, which was a change from the monotony of our passage, and served as a topic of conversation.

On the 22nd of May we were between the Fish Bay and the cape Lagullas, on the southern coast of the continent of Africa, and were now expecting to encounter a heavy north-western gale, which commences blowing here from May till August; the barometer was going down rapidly, and all were in apprehension. The Captain had ordered every thing to be prepared to meet the expected gale, when, on the afternoon of the same day, it began to blow hard; all the sails were taken in immediately, except the fore-topsail, which was double reefed; the gun deck ports were shut, and our cabin presented a most gloomy appearance; the ship began to roll and pitch a great deal, and we had to give additional security to our things in the cabin for fear of any giving way; this was the very first time we were in such a sea, and here we felt the necessity of warm clothing. We had hitherto had a favorable passage on the whole, considering the season of the year, but we began to feel uneasy when we were told that the gale would not subside at least for a fortnight, and we very much regretted not having left Bombay by the overland route, because we should have been very near the place of our destination by this time. On the morning of the following day, we were informed that the jib-boom and the sprit-sail yard were carried away during the night. The gale kept on blowing very hard, the sea ran mountains high, and the ship

rolled and pitched to that degree that we could hardly stand on our legs; our cabin was so dark and gloomy that we could not bear sitting for an hour in it.

The dim light admitted from a bull's-eye, and a small scuttle through the side, was not sufficient to read a book, and when we endeavoured to do so, we found it a difficult task because of the motion of the vessel. You are obliged to hold anything that is a fixture with one hand to keep yourself steady, and your book in the other; but then how are you to turn the leaves as you read them? If you loose your hold the next lurch will throw you off your seat, and you are in the danger of breaking your neck. On the deck the wind was so cold and blowing so hard, that it was no pleasure or enjoyment to pass a few hours there; thus we were sadly in want of amusement, and not we only, but we believe all the passengers on board. It was also a difficult task for our servants to prepare our victuals, as they could hardly keep the cooking utensils steady on the fire.

Though the Captain had allowed us a separate caboose, which was placed between the foremast and the riding bits, in a portable house built for the purpose, our cook dared not move from it, because close to it was stowed a quantity of hay, for a fine Arabian steed and two cows which were on board. The things on the cuddy table were

often carried away, and we found much difficulty in taking our meals; the plan we adopted was that of holding the plate in our hand and eating out of it, but the most laborious task was that of taking tea; we were obliged to hold the cup in our hands, and pour out the liquid and drink it off as fast we could. Such was the difficulty we had to encounter during this gale: here we were strongly reminded of the comforts of home, and we lamented undertaking the voyage by sea; and, indeed, had there not been the number of happy innocent children on board, whose playful tricks and smiles amused us, it would have proved an extremely tedious passage. We, therefore, strongly recommend those who leave England or India for either country, by all means to go by the overland route if they can possibly afford it. It may appear presumptuous of us to recommend a route we have not travelled by, but we have heard a great deal from those who have had experience in it, and by comparing them to the narrative of our voyage, we have drawn a conclusion in its favor, and have resolved to return to Bombay by the same conveyance. We hear that the track is so completely beaten, that there is very little fatigue attending it, except crossing the desert of Suez, but you are amply repaid for it by reaching to your destination much sooner, and seeing the countries which you traverse. However, with all the inconveniences here cited, we

had reason to be thankful to the Allwise Providence for landing us safely on the shores of England.

The contrast in the appearance of the ship was remarkable; hitherto she had carried many large and wide sails, but now a triangular one (called storm-sail) was her lot, and she was as it were deprived of her beautiful clothing. It was quite depressing to see her in that state.

We continued on thus till the 4th of June, and, unfortunately, much of the live stock which we had taken at Cochin died every day during this tedious gale, and there were only two sheep on board; and it was the opinion of all, that the wind would not change its direction for a fortnight, at least there was every appearance of its continuing to blow from the same quarter; and as we were taking tea in our cabin our kind friend Mr. Stuart, the purser, came in and said that he had an unpleasant message from the Captain to deliver; it was this,—we had hitherto been allowed mutton and fowls, but as there were no fowls on board, and only two sheep, the Captain regretted he could not supply us with any meat after they were consumed, and as it was uncertain when we should reach the Cape, we were requested to subsist upon rice, peas, &c. till then. There was a great quantity of salt beef and ham on board, but we could not as Parsees partake of them from our religious scruples.

This was no "unpleasant message" to us, because there were many other things upon which we could live for weeks together; and moreover we had a quantity of preserved meat with us, which was very little consumed, and proved of the greatest use and convenience to us, as it only required warming a little and it was fit to eat. But we were extremely sorry to hear that we should have to endure the discomfort, as much again as we had already experienced.

It was very fortunate that the ship did not sustain any other injury or loss than that of her jib-boom and the sprit-sail yard, and much of it is to be attributed to the excellent management of Captain Hopkins and his officers. The boom and the yard were soon replaced, but the poop and the upper deck now became very leaky; by the constant rolling of the ship the caulking became loose, and there was every passenger complaining about it; no remedy however could be done to it before the gale subsided.

On the morning of the 5th the wind moderated, and we were able to set sail. Oh! how delightful was it, every body was full of joy, and every heart forgot all the past trouble, and looked forward with pleasure to reach Simon's Bay the day after the following. In the evening there was only a slight breeze and the sea considerably smoother, and we made towards False Bay.

On the morning of the 6th we fairly entered the

Bay, but the wind being against us we had to tack about, or beat to the windward, to enter that safe, long-wished haven—Simon's Bay.

There are very high mountains on both sides of False Bay, and there was little verdure on them on account of its being winter, but they appeared destitute of wood. The ship's company and the officer had a hard work to tack the ship about the whole of the day, and at three o'clock on the morning of the 7th, we fairly cast anchor at Simon's Bay.

Simon's Bay is about twenty-two miles north-east of Cape Town; it is much frequented by ships during the north-westerly gales for which the Cape is celebrated; it is entirely sheltered from the winds by high mountains with which it is surrounded; many of them are more than three thousand feet in height from the level of the sea. We saw her Majesty's ship *Melville*, 74 guns, bearing the flag of Admiral Honorable George Elliot, and two or three other ships of the navy.

Simon's Town is situated opposite the bay at the foot of the hills, and is much warmer and pleasanter than Cape Town, which lies exposed to the wind. The view of the town from the harbour is very good. The houses are principally one story high, detached from each other, and facing the bay.

We were anxious to see Cape Town, and as our friend, Mr. Stuart was going there, we wanted

to accompany him, but he informed us that there was only one carriage by which he was going, and as he had other friends with him it could not take us all, and we must consequently wait till the same carriage should return back, to which we agreed, and, upon our request, he promised to arrange about our lodgings at that place.

Many of the passengers proceeded on horse-back to Cape Town and some of them were content to spend a few days at Simon's Town.

We were very much tired of the ship, and our friend assured us that the carriage would come for us on the 11th and we were to proceed by it at once to Cape Town. Accordingly we went on shore at the appointed hour, but to our great surprise there was no carriage, and we were told that it might possibly arrive in the evening but not before. We consequently took up our abode at a place called "Clarence Hotel" the only one of the kind. The houses in Simon's Town are mostly built of stone and whitewashed, with flat roofs. The inhabitants are principally the Dutch and the Hottentots. Here is a naval yard with storehouses, &c. to supply the Queen's ships, and a beautiful building appropriated for the residence of the Admiral and his suite. Shops are very few here and the place from its lonely position is very dear, no provisions are to be got in any quantity; the ships are supplied from Cape Town, from whence things are conveyed to this place by

waggon drawn by horses and bullocks. Water is very plentiful here and exceedingly good; here the houses are supplied by pipes leading from the very many beautiful springs that flow from the mountain in every direction.

Evening came but no carriage arrived, nor was there any intelligence about it, we were therefore compelled to remain at our present quarters till the next morning.

At length after a great deal of anxiety on our part, at seven in the evening we saw a chariot with six horses coming towards our Hotel, and we concluded it was for us; it brought one of the lady passengers of our ship, and we had a note from our friend stating, that he did not reach Cape Town before the evening of the 11th, in consequence of his carriage coming in contact with a waggon on the road which disabled it from proceeding onwards and which accounted for the delay. At six o'clock on the following morning we started by the coach, and we were very much astonished with the driver, who sitting on the coach box drove six horses at a very rapid pace. It must be a very difficult task for one to hold and manage six horses in hand, and driving furiously. There was another man with a long whip in his hand by the side of the driver, who kept urging the horses. Cape horses though not possessing the beauty and the speed of the Arabian are very strong, and capable of standing a great deal of fatigue. The

first three or four miles of the road from Simon's Town is very bad and irregular, but the rest is good and even.

We passed through a beautiful part of the country and saw many beautiful cottages, farms and woods, the scenery altogether was very lively and romantic.

We were driven to the George's Hotel, a large and respectable place where arrangements were made for our reception, and we found every comfort at this place. We here found our friend Colonel Henderson, late Clothing Agent at Bombay, who having heard of our arrival was kind enough to come and see us. We remained three days at this place, and were favored with a call from John Warden Esq. the Chief Magistrate of Bombay, and we were introduced to two merchants of some note, Mr. Burnie and Mr. Ruthenford, from whom we received much kindness and attention.

The colony of the Cape of Good Hope was taken from the Dutch by the British in the year 1802, and its capital is Cape Town. This celebrated Cape was first doubled by a celebrated Portuguese navigator, Vasco de Gama in 1494, and who was the very first European that came to Hindostan, and the first place that he landed at was Calicut on the coast of Malabar; thus he opened the way for other adventurers, and many discoveries were made by the Portuguese after-

wards, the Dutch followed their example, and reaped a rich harvest by trading with India, and subsequently the English, who are now rulers of the country.

Cape Town is very neat and well built, and stands on a gentle declivity towards the sea, the streets are very wide and straight, and intersect each other at right angles, which adds considerably to its beauty; the houses are principally two stories high. Canals of water run through many of the streets and fine shady trees are to be found in some of them.

The Town is watered by a stream that issues from the Table Mountain. The inhabitants are the Dutch, English and Hottentots, or the natives of the colony. There are batteries, many forts and a castle to defend the town. Mr. Burnie kindly took us to see the Botanical Garden, where all sorts of plants and shrubs were reared and taken care of for experiments; it was not very large, but well conducted, and in good order.

The celebrated Table Mountain is in the view of the town, and the land at the summit of this mountain, called Table Land, is 3582 feet above the level of the sea, and is very flat.

The climate of the Cape is very healthy and salubrious; it neither has the extreme cold of England, nor the oppressive heat of India; and from the equality of the seasons and the peculiarity of the soil, vegetation, both of Europe and

Asia, thrives very well. Here we saw pomegranate trees, plantain trees, and others of Indian production, and we were told that much of English fruit and vegetables were to be had in their proper seasons.

On the whole we were highly delighted with what we saw of the place; and we returned to Simon's Town in the same carriage and six, in three hours: the cost of the conveyance was 12*l*.

By the 21st of June, having completed our water and provisions, and having caulked the deck, and repaired or replaced every thing that had suffered from the gale, we weighed anchor, and put to sea with a favorable breeze. We should have mentioned, that False Bay abounds with plenty of fish, mackerel especially, of which the ship's company caught a great many, and it was a very great treat to us for some days.

At 10 A. M., on the morning of the 6th of July, we descried the Island of St. Helena. It appeared as a huge rock standing in the midst of the wide ocean, and the same evening we were so close to it that we might have thrown a biscuit on shore. This island may be conceived to be a stupendous rock rising out of the bosom of the sea, quite inaccessible except at one place; it is situated in the Atlantic ocean, and about 1200 miles distant from the west coast of Africa.

The whole area of it is, we understand, about 30,000 acres, a greater part of which is unfit to be

cultivated. The cliffs, on all sides, are from 700 to 1200 feet in height, and it is so well defended by fortifications, as to be considered invincible in the hands of the British.

As night came on, we hove to on the other side of the island; and on the following morning we came opposite James' Town; a boat was sent on shore, which returned in a few hours, and we set sail with the hope of touching at nowhere else but England.

The only town on the island of St. Helena is James' Town, and the population is said to be upwards of four thousand. This barren and lonely place became the scene of great interest, from being the confinement of that extraordinary man Napoleon Buonaparte, who having for a series of years disturbed the peace of Europe, became an exile to this place in 1816, where he ended his earthly career on the 5th day of May, 1821, and was interred with all the honors due to him as a great military man. We have since read, that his remains were conveyed to Paris by the French, and buried in that country.

On the afternoon of the 10th of July we passed Ascension Island; and on the 26th of the same month, about the parallel of the Azores, or the Western Islands, we descried a sail early in the morning, right ahead of us. We hoisted colours at seven, when she was sufficiently near; but she did not do so; and after repeated attempts,

we could not learn what she was: it was, therefore, thought that she must be a pirate ship, and we were informed that these latitudes were much frequented by this description of vessels formerly, and they took shelter among the islands when chased. There was only a slight breeze, and the captain took the precaution to give her the best possible reception he could. Accordingly, the poop ladders were removed, and the deck cleared for action. We had only six guns on board, which were kept in readiness—the gunner was called upon to do his best in case of action. The captain, in the meantime, kept watching her movements by the aid of his glass.

A dead calm now succeeded the wind; and as we and many others were looking at our suspected enemy from the poop, and forming all sorts of conjectures about her, one of the midshipmen cried out, "she is shortening the sails." "What?" exclaimed the captain. "She is shortening the sails, sir," was the answer. He looked through the glass, and found that it was the fact; and our suspicions were the more enhanced that she was really a pirate ship, and there were many opinions expressed about her superiority over us in force, and how ill-prepared we were to meet her. However, there was a great deal of anxiety and activity on board.

The captain being sensible of his inferior force as a merchantman, very prudently did not allow the sails to be taken in, lest he should excite the

attention of the Pirate, but made every possible effort in defensive preparations. An hour elapsed, but there was no further symptoms of hostility on her part, and we could not make out what she was about.

She was now within two miles ahead of us, and the captain again ordered the colours to be hoisted, and we were rather surprised to see that she exhibited in return the American flag. It was now concluded that she was a trading ship, and we could, by the aid of our glasses, see that her deck was quite destitute of guns; and the few hands that we saw, convinced us of her being far from what we had suspected her to be.

A boat was immediately sent on board, in order to learn what news she had brought from America. Our friend the purser, the second officer, with three other passengers, went with it, and the account they brought was, that she was an American barque, bound for the African coast, for the purpose of seal fishery: she had no later news than what we had had at St. Helena, and her condition was not worth noticing, and having mistaken us at first for a ship of war, she purposely concealed her colours. A breeze having sprung up at night, we lost sight of her the next morning.

We entered the English Channel with a favorable wind, and on the 20th of August, at five in the afternoon, we descried the land, and in the evening saw the light of the Eddystone lighthouse; and the joy, evinced by all the people on

board on seeing the shores of their native land after such a long and monotonous passage, and the anticipated pleasure of seeing their friends and families after a long privation, may be more readily conceived than described.

We arrived at Dover with a favourable and fresh westerly gale, and it was a beautiful sight to see the ship move at the rate of eight knots an hour with double-reefed topsails; a great many of the passengers left the ship; our friend Mr. Stuart also went on shore to proceed to London, and from thence to send two steamers to tow us into the Thames River. From here we took a pilot on board, and came to anchor at the Nore, with the assistance of a steamer that arrived to tow us.

We should have mentioned, the cliffs at Dover are high and chalky, and the celebrated castle called Dover Castle, is seen standing on the highest part; immediately below it, to the west, is situated the town of Dover. This place is considered of the greatest importance in a military point of view, as it defends the entrance to the rivers Thames and Medway; the fortifications have received many improvements during the last French revolution, and it was made a military station. It has extensive excavated barracks, which would contain upwards of three thousand men.

The strait of Dover divides England and

France, and the castle is about 21 miles distant from the coast of France, which is in sight.

Here we were greatly surprised to see the amazing number of ships going out and pouring into the Thames, and steamers every now and then running backwards and forwards; we cannot convey to our countrymen any idea of this immense number of vessels, and the beauty of the sight. You will see colliers, timber ships, merchantmen, steamers, and many other crafts, from all parts of the world, hastening, as it were, to seek refuge in a river, which is but a stream compared to the Ganges and the Indus, or the still larger rivers of America. We thought it a great wonder that such a small and insignificant a speck as England appears on the map of the world, can thus attract so many nations of the world towards her; and we asked ourselves, why should not those mighty rivers and countries, which have naturally much better accommodations for commerce than England, be not frequented as much. But a moment's reflection satisfied us on this point—the answer presented itself—and we will tell our countrymen that it is the persevering habits of the English, it is the labour and skill of that people, that is the cause of such attraction. They are never satisfied with any one thing unless it is brought to perfection, it does not matter at what sacrifice. They are ever ready to receive improvements, and thus they have

attained that celebrity in their manufactures that countries which grow materials bring them here to be converted into useful things, which are distributed all over the world; and while other countries were satisfied with what they had, England was eager to augment her resources. And how has she effected this? What has been the principal means of her doing it? Why, by knowledge or science put in practice, because knowledge is power; and it is by the power of knowledge *alone*, and not by the power of arms, that she has so many means of attracting the world to her, and extending the spread of her manufactures: however, this is a digression—we will speak of it another time, and now return to our voyage. Another steamer arrived the next day, and we were taken to Gravesend by their joint efforts. Thus ended our voyage, and we returned thanks to our Creator in thus conducting us safely through the numerous perils of the ocean. Before we take leave of the subject, we have to acknowledge the uniform kindness and attention we received from our good friend Captain Hopkins, as well as the trouble he always took in studying our comforts during the voyage; and we feel equally sensible of the civility we received from his officers, to all of whom we would wish to return our sincere thanks.

CHAPTER II.

ARRIVAL AT GRAVESEND, AND PASSAGE TO
LONDON.

ON the 27th of August, 1838, the Buckinghamshire arrived at Gravesend, at five o'clock in the afternoon, and we immediately went on board a commodious steam-vessel belonging to the "Diamond" Company, in order to proceed to London; the distance between these two places is thirty miles. This was the first time we were ever on board a steam-vessel going from one place to another, and we were very much struck with the good accommodations for so short a passage. There are three cabins, or saloons; the one nearest the stern is appropriated to the female passengers (who pay 2*s.* each for their passage), fitted all round with handsome sofas; and there is also a large cabin adjoining, called the grand saloon, where both males and females, who pay 2*s.*, are mingled together. This is elegantly fitted up; handsome couches all around. A large mirror is over the fire-place, and a number of mahogany tables are distributed about the saloon, which has a most beautiful appearance. There is also a very

large cabin in the fore-part of the vessel, where all persons who pay 1*s.* 6*d.* each for their passage resort ; and upon the deck, abaft the paddle-boxes, there are several cabins for those who pay the same fare as the after cabin : any person who passes to the sternward of the funnel pays the higher rate of passage money.

In the principal saloon, you can have either breakfast, dinner, or any refreshments you require, consisting of tea, coffee, and cold meats, ale, porter, or wine, at very moderate charges. One shilling and sixpence for a hot dinner, exclusive of wine, or any spirit ; one shilling for either breakfast in the morning, or tea in the afternoon, with butter, and good new bread. A very large proportion of the passengers take a meal on board to save time, thus eating as they travel.

These boats have carried as many as twelve hundred passengers at one time, and one of the vessels carried fourteen hundred on the day King William IV. was buried.

There were many people on board, and we were the objects of great attraction, and many were anxious to know where we came from, and who we were ; and our friend Captain Hopkins, who was with us, satisfied their curiosity on these points. It was a beautiful clear evening, and the wind being favourable to us made it very agreeable. The steamer was going at the rate of 11 miles an hour, and the music playing on board was really

delightful. The river Thames is the largest river in England ; and when we came within about five miles of London, we were surprised at the amazing number of vessels, from the humble barge to the more beautiful ships and steamers of all descriptions. The colliers were the most numerous, and vessels were anchored close to each other, and the river seemed to be almost covered with vessels ; and the masts and yards give it the appearance of a forest at a distance. Indeed, there were to be found ships from all parts of Europe, Asia, Africa, and America ; and a great number of steamers ply about, in all directions, filled with passengers.

None of our countrymen can form an idea of this noble river, and the shipping on it. The English may well be proud of it, though a small stream, compared to some of the largest rivers of the world. The traffic that is carried on, is, we may say, not to be surpassed by any.

London is said to be at present the metropolis of the commercial world, and we never can doubt the assertion, because we have had opportunities of seeing the extensive trade carried on, and the means the English have of supplying the world with the produce of their labour and industry.

It was nearly dusk when we arrived at London Bridge, notwithstanding which, an immense number of persons flocked round us to view our costume ; for in addition to our two selves, we were

accompanied by a friend, and also by two of our domestics, and five individuals in the Parsee costume, collected quite a mob, through which it was difficult to pass to our carriage; we think quite a thousand persons were congregated together. We proceeded through the city of London to the Portland Hotel, where arrangements for our reception had been previously made. And from the immense number of people, and vehicles of every description, that we saw hurrying along, apparently in great haste, and from the increasing noise, we were apprehensive that some public commotion had taken place, or that there was some grand spectacle to be witnessed, towards which they were thus hastening. But yet it appeared so odd, that there was as much haste and desire to get forward in those who moved eastward, as well as in those who were progressing westward. Every street down which we looked, appeared to be pouring out countless multitudes to swell the throng. And we were lost in conjecture as to what this bustle could possibly mean. But when we were afterwards informed that this constant tide of human beings was to be witnessed every day for twelve or fourteen hours, we were, indeed, lost in amazement, at the myriads that must exist in London, to furnish out of doors such an exhibition of people.

CHAPTER III.

INTRODUCTION TO SIR CHARLES FORBES.—THE DIORAMA AND THE ZOOLOGICAL GARDENS.

WE were honored by being called upon by our kind and worthy friend Sir Charles Forbes, Bart. his son George Forbes, Esq. and Captain Cogan. Sir Charles Forbes very kindly took us to the Regent's Park, where John Romer Esq. late Councillor and acting Governor at Bombay, resided, and to whom we had letters of introduction ; we were handsomely received by him.

Sir Charles then took us to see an exhibition called the Diorama, situated in the Park. It is a most extraordinary optical illusion. Upon our entering we beheld as we believed the interior of a spacious building, intended to represent the interior of a church at Florence ; most beautiful were its fittings, and its style of architecture was magnificent ; whilst we were looking on in wonder and surprise, it became enveloped in flames, and we much regretted to see so beautiful a place thus destroyed. The fire continued to rage until all the decorations and fittings disappeared, one after the other, and in a short time we saw only

a mass of ruins, where we had just previously been gazing upon that beautiful building. We have since learned that the mode adopted to produce this imposing spectacle is a modification of an exhibition called the Phantasmagoria, which some forty years ago used to fill crowded audiences with much terror. Spectral figures appearing to approach, and retire ; appearing sometimes as small as a rupee and gradually assuming a colossal stature, and then again gradually becoming less and less until finally disappearing. It is managed with a magic lanthorn prepared especially with lenses of great power, and the shadow is caught and embodied upon very fine muslin, which is drawn across between the lanthorn and the beholders, and the light is judiciously admitted from above and at the sides, and the fire of course is merely chemical or false fire,—at all events it was to us a very great treat. The terms of admission is two shillings.

Sir Charles Forbes in the afternoon of the same day, took us in his carriage to a most lovely spot in the Park, called the Zoological Gardens ; on our way thither we saw a great number of very elegant carriages, drawn by beautiful spirited horses, with harness of superior description, and the coachmen and servants behind the carriages dressed in liveries of every known colour ; within the carriages as they swiftly rolled by, we saw many women, fair and with light hair, many

of them appeared to us most beautiful. All of them appeared to have mild blue eyes, and very sweet expression of countenance, and we saw more of female beauty in a few hours, than we had ever beheld in all our lives.

The buildings within the Park are magnificent. This establishment is kept up by annual subscription and every subscriber has an unlimited number of tickets, which admit themselves and the resident members of their families gratuitously, and any other person who may present them upon payment of one shilling each.

Within this garden, in appropriate buildings, are congregated almost every description of foreign and domestic animals and birds. From the lordly half reasoning Elephant down to Mice, and from the Ostrich and Cassowary down to the Humming Bird. There are Lions, Tigers, Panthers, Bears, Wolves, Hyenas, Jackalls, Wild Boars, Zebras, and indeed all and every known animal. Of the monkey tribe there were hundreds, from the Ourang-Otang to the little Marmoset no longer than a Rat. And to see their antics and freaks perpetually in motion, squeaking, grinning, making all sorts of grimaces is very amusing.

The birds were of all sorts ; of the Parrot and Macaw sort, there were several score. And oh ! how beautiful were they, scarlet, green, gray, white, all the colours of the rainbow. Eagles of every known sort. Owls a great number. Hawks

an immense variety, and the Water Fowl from the graceful Swan to the minute little Teal and Dabchick. We were very much delighted.

The Elephant was so extremely docile and obedient to his keeper that he took a small piece of money and handed to a person who sold cakes to receive some of them in exchange for his money. The Bears too amused us very much, they were in a deep pit in the centre of which there was fixed a straight pole of wood, up which they kept crawling to receive from the spectators a cake upon a stick, when clasping the pole with their claws, down they slid just like a sailor with a rope. Some of the monkeys appeared to be quite delighted to be taken notice of. Every thing connected with the animals is kept perfectly clean by the keepers, a large number of whom are constantly employed. The expences of this establishment must be enormous, if we take into consideration the first cost of the animals; the Rhinoceros only we were told cost one thousand guineas, which in round numbers is equal to eleven thousand rupees, the daily consumption of food, the wages paid to the servants, and the keeping in constant order the buildings necessary for the safety and preservation of so large a collection. This place is always resorted to by those who can afford to pay for admission in the evening, especially in summer, and here while they amuse themselves they gain information.

During the whole time we were in the Garden, we attracted a very great number around us from the peculiarity of our dress, and we were objects of very great curiosity to the visitors,—as much so perhaps as the winged and four footed inmates of the place.

It was amusing to hear one call us Chinese, they are Turks says another ; no they are Spanish, vociferates a third ; thus they were labouring under mistakes, and taking inhabitants of British India for natives of Europe.

We have also seen the Surrey Zoological Gardens, which lie about a mile and a half above the Blackfriars Bridge on the Surrey side of the Thames, but with the exception of a conservatory of beautiful plants upwards of three hundred feet in circumference, it has so near a resemblance in its inmates to that in the Regent's Park, that no particular description is necessary.

The plants are principally rare climbers, and will well repay the florist for his trouble in visiting this place.

Here is a better collection of wild beasts ; and an order of a subscriber and the payment of one shilling admits you.

CHAPTER IV.

INTRODUCTION AND RECEPTION AT THE EAST
INDIA HOUSE.

SHORTLY after our arrival in England, we were taken by our friend, Mr. George Forbes, to the East India House in Leadenhall Street, and we had the honor of being introduced to the then Chairman of the Honorable East India Company, Sir James Law Lushington, and the Deputy Chairman, Richard Jenkins, Esq. (now Sir Richard Jenkins). We were received with great condescension by them, and were assured of our receiving every encouragement during the prosecution of our studies in Great Britain.

We were very much struck with the appearance of the India House, and we could not help remarking how much of the future happiness or the misery of the countless millions of India depended on the transactions carried on within the walls of this building, and as we thought that our countrymen would like to know something about this celebrated place, we have, in another part of this little work, annexed a brief account of it, as well

as the origin and the history of the Company, which we hope will prove acceptable.

We subsequently waited upon several members of the Honorable Court of Directors, and their worthy Secretary, James Cosmo Melvill, Esq., and J. C. Mason, Esq. (Marine Branch), from all of whom we met with the kindest reception, and subsequently experienced many favors, which we have acknowledged in our preface.

We had brought a letter from one of our native friends, to our present worthy governor, Sir James Rivett Carnac, Bart., and it would be impossible for us to express our gratitude in terms strong enough for the numerous favors conferred on us by that excellent and worthy personage. We had the high honor of being introduced to the Right Honorable Earl of Minto, First Lord of the Admiralty, the Right Honorable Lord Glenelg, the then Colonial Secretary, Sir John Barrow, Bart., Secretary to the Admiralty, and Sir William Symonds, Surveyor of Her Majesty's Navy, by the means of letters which Sir James honored us with, and the reception and civility we met with from these noblemen and gentlemen, far exceeded all our expectations. We hailed his Excellency's appointment (which very shortly took place), as Governor of Bombay, with much pleasure and satisfaction, as we knew the regard he had for the natives of India: and on our waiting upon His Excellency a

few weeks before his departure, he most kindly and condescendingly expressed a desire for us to come from Egham to pay our respects just before he left England. We did not fail to do so; and on our taking leave, we sincerely prayed to our God for health and happiness to himself and his family, and we deeply regret the indifferent accounts, that have reached us since his Excellency's arrival at Bombay, concerning his health, but trust that Providence will, ere long, restore him to strength and vigor, and that he may long enjoy all the blessings in this world.

The anxiety His Excellency evinced for our improvement was very great; it was now three months since we had commenced our studies, and had made a little progress in them, with which His Excellency was much pleased, and suggested the propriety of sending out the book we had written to our friends, in order that they may know what we have been doing, at the same time he condescendingly undertook to take them out and deliver them to our friends at Bombay. This we considered a very great favor, and we very much admired the affability and kindness with which His Excellency treated us, who were so much inferior to himself in station of life, rank, and fortune; but we concluded that it is by good behaviour that one secures kindness and esteem of great men in England, and not by wealth and

fortune. We also had the honor of being introduced to one of the Misses Carnac.

We beg the indulgence of our readers for occupying so much of their time in enumerating all we have said, but we feel that we should be wanting in gratitude did we not inform our countrymen of the attention we met with in England, in order that they may be actuated to visit the country for the purpose of educating and enlightening themselves, and that by their seeing the wonderful progress the English have made in the arts and sciences, they may excite the energy of their fellow-brethren in India, and impress them the more with the great importance of knowledge, and of which we are so much in need.

CHAPTER V.

PUBLIC CONVEYANCES AND BRIDGES.

ONE of the first things that struck us with astonishment was the immense number of carriages of different descriptions, that are to be made use of in London for conveyance of passengers from one part to another, and the largest, which are called Omnibusses, first claim our attention; a carriage of this description is in the possession of Framjee Cowasjee, Esq., at Bombay, which, we believe, he ordered to be made in England, for his own use, a few years ago. Where they all come from, where they are going, where the people could be found to fill them; how the owners, drivers, and conductors were to be paid seemed a mystery to us, and we diligently sought for information upon this subject. We hear that nearly seven hundred are running in all directions every day; and as some of them perform their journeys four times each day, they pass a given spot each day eight times, thus making above five thousand trips a-day. They cost from £100 to £140 each, and are so constructed as to carry twelve or fourteen

persons inside, with their faces to each other, and three or four on the top. They are mostly fitted up very nicely inside, lined principally with a kind of plush, something like velvet, either red or green; many of them have a lamp at the end; and to the great mass of London population are a very great comfort. The price charged is sixpence for each person, and for this sum you may ride from below Islington to Charing Cross, about five miles, and from the East India Docks to Oxford Street, which is about six miles, for the same. But although you may ride this distance, and many do, yet the greater proportion only ride about half the distance; and the calculation is made by the proprietor, that they will in a journey of that length have two separate loadings. It is quite amusing sometimes to see a stranger get into one of these vehicles, and desire to be set down at a named place, which perhaps is not more than a quarter of a mile from the spot where he got in. The better plan for a stranger to pursue is to ascertain that the Omnibus he gets into is nearly full, then will he be sure, if there is no accident, to reach his desired object rapidly. But should he get into one nearly empty, he will be annoyed by finding that his journey will be indeed a long one; for, although there is a heavy penalty against their stopping at any except particular places, or to take up a passenger; still they evade the law by not indeed

stopping, but moving at such a pace that one could with ease get on twice as fast by walking. The greatest number that run in any direction are from Paddington to the Bank, which is quite five miles, and a very bad road to travel, as there are steep hills. They run about one in every three minutes, from soon after eight in the morning until after ten at night. In addition to the first cost of the Omnibus and harness, we must add that of the horses; and, although the Omnibus is only drawn by two horses, every proprietor of two Omnibusses is obliged to keep at least seven horses, so as to give the proper rest to enable them to drag these heavy loads. The Omnibus weighs about 17 cwt. of 112 lbs., and eighteen passengers, a driver and a conductor, would weigh more than a ton; so that they have, a great portion of their journeys, to drag nearly two tons weight, at an average speed of more than six miles an hour. The cost, then, of two Omnibusses, and their harness for horses, would be at least £250; the seven horses would cost quite £25 each; there are the daily wages of the driver and conductor (the latter receives 4s. a day). Then there is the keep of each horse, which at least, to keep them in good condition, would amount to 1s. 6d. a day each. There is the constant wear and tear of machines and harness, the shoeing of the horses, the mileage duty which they pay for running, the turnpikes, the accidents,

the occasional fines for breaches of law ; and it is wonderful how, with sixpenny fares, they can make it pay them. But although a doubtful speculation to the owners, to the public they are a very great accommodation ; from every place within four miles of London they are constantly running, and at several periods of the day they have quite different classes of customers. At about a quarter before nine you will see all the Omnibusses approaching the neighbourhood of the Bank with sober-looking business-like persons, who are principally clerks in the Bank of England, the numerous private banking houses, or some of the thousand mercantile firms in that vicinity. At first sight it appears extravagant that you should daily see the same persons, at the same hour, alight from the same vehicle, and you think it a lavish daily expenditure ; but most of them are married men with large families, who reside in a neighbourhood where they can have a commodious house in an airy situation at a moderate rent, which enables them to add the six shillings per week which they pay for riding to the article of rent, and even then they can get a house at nearly half what they would pay for one in a confined situation nearer to their business. At about ten, or half past, you see men a little gayer in their attire, a great deal stiffer in their manners, and who seem to think themselves very great men ; these are the upper clerks and cashiers of

banking houses. About this time, too, you will see smirking, priggish-looking men arriving in great numbers, many of them, if not Jews, looking to have a cross of the Israelite in their blood: should you happen to be in the same Omnibus with them, you can immediately detect them; should an intimate friend get into the Omnibus, they will play some quiet practical joke upon him as he passes, either by putting out their feet to cause him to stumble, pulling his coat tail, or some boyish freak to get their hands in for their childish play, when they get to kicking each other's hats to pieces in their room for business. Some of these are members of the Stock Exchange, where money operations are transacted. The next lot consists of the principals of firms, who ride up in the Omnibus to their house of business in the morning, and their wives and daughters come about two or three in the afternoon, in their own carriages, to fetch them for a drive in their way home. Most of these persons are daily taken up at their own doors; and at the several hours of three, four, five and six, may be seen progressing to the side of the Bank to re-enter their vehicles, upon their return to spend a pleasant evening in the bosom of their families. Very few ladies are to be met with in Omnibusses; they do occasionally ride in them, but only in or out of town. To travellers in quest of orders, visitors to London who wish to see all they can as

soon as time will admit, and at as cheap a rate as possible, Omnibusses are of very great advantage.

We were also much surprised to see standing in the middle of the principal streets a very great number of carriages drawn by two, and smaller ones by a single horse, all of which are for hire; and for very small sums you can go to any distance you please. The larger ones are called Hackney-coaches, and the little ones are called Cabs. Their drivers are very apt to impose, and the law has fixed what they are to charge; and they are heavily fined if they demand more than they ought to do. Their rates are as follows:—For Hackney-coaches, any distance not exceeding one mile, one shilling; and for any distance exceeding one mile after the rate of sixpence for every half mile, or any fractional part of half-a-mile. But as many persons who hire them wish to call upon their friends, and pay a visit, and prefer the coach to wait for them, the following is their fares computed by time:—

Not exceeding	s.	d.	Not exceeding	s.	d.
30 minutes	1	0	2 hours	4	0
45 „	1	6	2 hours and a quarter	4	6
1 hour	2	0	2 hours and a half .	5	0
1 hour and quarter .	2	6	2 hours and 3 quarters	5	6
1 hour and half . .	3	0	3 hours	6	0
1 hour and 3 quarters	3	6			

and so on, for any time not exceeding three

hours, after the rate of sixpence for every fifteen minutes, or a fractional part of fifteen minutes.

The driver has the power to charge by *distance* or *time*; cabriolets (or cabs) are one third less than the above. Strangers, who have boxes or any luggage, should always say to the driver, before they get into either a hackney-coach or a cab, "Remember, you are not to charge anything for my luggage," when they will always agree to make no extra charge for that; else, when they put you down, they will always try to make you pay for it. You should always take the number, which is painted outside coaches and cabs, or shewn on a metal plate with raised figures hung inside the carriages; because, if the drivers are insolent, or overcharge you, or if you leave anything in them, you have only to apply to the office in Somerset House, where they are registered, to get justice done you.

The number of hackney-coaches which are about London streets is from six to seven hundred; a very great proportion of them are large, and will carry six persons; and although they are only licensed to carry four, the coachman will not object to as many riding as wish to get in, but he claims an extra fare for every person above four that he may be required to carry. A great many of them, perhaps ninety out of every hundred of them, have formerly been carriages be-

longing to the nobility and gentry: the coach builders have taken them in exchange for more modern ones, and after being fresh painted and varnished, they are purchased by the proprietors of hackney coaches. There are a considerable number of chariots, to carry three persons inside, most of them also were built and first used by gentlemen, and when they began to get soiled and to look shabby they got into their present occupation. The cabriolets (or cabs) as they are most commonly called are small light two wheeled carriages to carry two persons drawn by one horse—although there are some modern ones with four wheels which shut up and you get in at a door at the side. Omnibusses answer the purpose very well for all persons in London who are going to any place close to the street through which they pass, and where saving of money is an object, as for the small charge of sixpence, you can ride for many miles as previously shewn. But if you are going to any of the squares, at the west end, and are not in a great hurry, for one shilling per mile you can have an hackney coach or chariot, but if you want to go only one hundred yards it is still a shilling. The great advantage to strangers is that the drivers of hackney coaches and cabs know every place, and you have only to name where you wish to go to, when they drive forthwith to the spot, and knowing all the bye streets they are enabled to get

quicker to their journey's end, than if they kept in the principal thoroughfares, where there are frequently long stoppages. But before you get in, ask of some respectable shopkeeper or of a policeman, how far it is to where you wish to go, and then tell the coachman that you understand it is so far, and if he will take you and your luggage for such a sum you will go, and not otherwise, then you will be secure from imposition; or tell him to drive you two, three, or four miles in the direction of the place to which you wish to go.

It is supposed there are about fifteen hundred cabs and their charge is eight pence per mile, and if you are in haste to get any where, you can readily select one with a good horse, which will get you over the ground at more than eight miles an hour; it is wonderful they are not crushed to pieces; you will see them fly through an opening between an omnibus and a heavy waggon with not more than an inch to spare on either side, and it is quite fearful to a stranger to see them thus braving all risks to gain time. It is very amusing to those who know London well to see how cunning and knowing the drivers of these vehicles look, when a stranger directs them to drive to any place not more than a few yards distance. Their thumb is placed to their nose and a twirl of their outstretched fingers announces to their brethren that they have "caught a flat," to use their own words.

Mr. Austin the master Rigger of Chatham Yard was Boatswain to Admiral Nelson and after one of his great victories had occasion to visit the Admiralty, he knew little of London, and having been stopping at the Golden Cross, Charing Cross, which is in sight, and within a few yards, of the Admiralty, he called a coach and ordered to be driven there. He was shut into his vehicle driven round by Spring Garden, instead of crossing the road direct to it, and in a few seconds was set down and paid his shilling. He often now laughs heartily at his short ride. Coaches and Cabriolets with their horses are to be found with their drivers night and day, rain or shine, upon their stands; the horse has his food in his nosebag, a man to water them is upon each stand, and the horses and drivers appear to be of that description of animals that no weather can hurt, no disease reach, and in fact weather proof. It is said that, the expenditure upon a hackney coach for the duty, licenses and feeding of their horses is upwards of thirty shillings per week, there is then the driver to keep, an occasional new horse, and repairs to their carriages, so that these also, although a great comfort and convenience to the public, must be a speculation not paying largely for the capital employed, including risks.

We may as well at this part state that private vehicles of every description may be hired in London, and on the evening of Sunday it is

curious to see the thousands of various carriages and horses which are coming from all points into London. You will see Stanhopes, Dennetts and Cabs of high finish and good horses; you will see Gigs and Pony Chaises, Taxed Carts and every other description of known vehicle into which a horse can be placed; the poor horses dragging along their heavy loads, as if every body was resolved to get as much work out of them as they possibly can. You will see many hundreds of four wheeled open chaises drawn by one horse, with seven or eight heavy persons behind a poor worn out animal, and generally the lash of the whip worn off, and part of the leather thong untwisted by thrashing the wretched creature to make him increase his speed. You will see poor miserable undersized donkeys drawing a cart full of people and the driver with a stout stick constantly beating the poor half starved animal; all this may be seen at any of the principal entrances, such as Hyde Park Corner, Elephant and Castle, or Shoreditch Church.

Yet perhaps no where can such really elegant carriages and good horses be procured, as may be had for hire in London by those to whom money is no object; you can at some of the Mews in London procure for about two pounds for the day of sixteen hours, a carriage that cannot be distinguished from the undecorated carriage of a nobleman, with horses as good as are

driven by any gentleman, and you may be driven (as far as the strength of the horses will enable them to draw a carriage) by a decent dressed coachman, whom nobody would know from a servant out of livery.

Very many persons who have houses without the convenience of stables for their horses, or being without a coach house, contract at perhaps £300. a year for a man and pair of handsome horses with a beautiful carriage to come to their houses every day, and in fact use them exactly as if they were their own, having this additional advantage that whereas sometimes their own horses would be unwell, and they would be unable to use them, the parties agreeing to furnish the horses and carriages, have to provide horses every day in the year by substituting fresh horses when necessary: Physicians and Surgeons do this sort of thing very often.

There are other persons who wish to ride three times in every week upon fixed days at certain hours, and these persons for riding four or five hours each day in a similar vehicle pay about £100. a year. There are others who always have a good vehicle on the Sunday for four or five hours, and pay about £60. a year, all the above named terms are for first rate carriages and horses; others from which the first gloss has been worn off and horses of second rate quality are to be had for much less money, perhaps about half

the sums named. Another mode is for persons who keep their own carriage hiring by the year from the Livery Stable keepers, horses which are groomed, and driven by the gentleman's own servants, the person constantly agreeing to furnish them continually with good handsome horses. A large proportion of travelling in England, is by what are called post horses and post chaises. These are carriages like chariots, and are drawn by two horses most usually, but four when required. The carriages are very good and easy to travel in, but in a conspicuous situation upon all of them is placed the owner's name and place of abode, so that they cannot be mistaken for private carriages. For a chaise with a pair of horses you pay fifteen pence per mile, and at about every eight or ten miles you have fresh horses, and post boy, to whom about two shillings and six pence per stage of eight or ten miles is given. If you add to this the payment of turnpikes to keep the roads good, it will amount to about one shilling and ten pence per mile. If you have four horses you have two post boys to pay, and then there is thirty pence a mile for chaise and horses to pay. You can travel from seven to eleven miles per hour at your discretion by either of these modes.

But for travelling expeditiously and pleasantly *there is nothing like a well horsed stage coach*, where four, or in some coaches six ride inside, and ten or twelve on the top. These stage coaches are many

of them beautifully built and tastefully decorated, with high bred blood horses that only require to be guided and scarcely touched with the whip. The coachmen are many of them in appearance quite gentlemen, indeed we believe there is one nobleman, there certainly is one Baronet, and many of the sons of gentlemen who drive stage coaches. These travel at upwards of ten miles an hour, they have fresh horses every eight or ten miles, and to those who wish to see scenery and to enjoy a rapid travel through the country, let them some fine summer's morning get upon a coach box, alongside of the coachman, who knows every place and every thing connected with it, and we are quite sure they will be amply repaid for their trouble ; the rate of travelling is about threepence per mile outside, and about fourpence halfpenny per mile in the inside, added to which every time you change your coachman, which in long journies is about every thirty miles, the outside passengers give the coachman one shilling each, and the inside passengers two shillings each.

Having given the description of the public and private conveyances of London, we cannot conclude the subject without suggesting to our countrymen and proposing a plan for adopting the omnibus system at Bombay.

We know that there are thousands of persons residing out of Fort, and who hold appointments in Town, at the numerous mercantile houses and at

the public offices as clerks, cash-keepers and others employed in various duties, and many of them are not in a position to keep a horse and gig, they in consequence make up generally a party of three or four and engage a bullock or horse carriage for a sum of about 15 or 20 rupees per month to convey them to and from the scene of their business ; besides there are many who in very hot sultry days or in wet weather prefer hiring a conveyance to the fatigue of walking ; we are therefore of opinion that if a company was formed, and a sum sufficient to answer the cost of carriages, horses, harness, &c. were raised, and were these vehicles to leave town and the places where those who thus daily come there reside, at certain and convenient hours of the day they would be sure to find a great number of passengers, who would be glad to prefer it to the uncomfortable and slow mode of locomotion we have at present.

A sum of 15000 rupees will be we think sufficient for providing a dozen of omnibuses, (which need not in the first instance be quite so expensive as in England, yet capable of carrying as many passengers,) the horses and other furniture, the keeping of them with the wages of the driver and conductor and other expences including the interest of the capital invested would come to about one thousand rupees a month. Now suppose we calculate each carriage to make daily journeys, conveying, at an average, twelve people

backwards and forwards at the very moderate charge of two annas each, the daily income would be six rupees, and at that rate the whole of them would bring 2160 rupees per month, which after deducting the expences would leave a profit of 1160 rupees to the proprietors. Thus we have shown on a rough calculation that it is not an unprofitable speculation, and we most sincerely trust that some of our countrymen will weigh and consider the subject, and we are confident that this mode of conveyance would add a great deal to the physical comforts of the inhabitants of Bombay.

Indeed the undertaking is within the reach of a single individual, and we must observe that should our suggestion be put in practice, it will be necessary to obtain the sanction of the proper authorities for it, as well as their protection to the parties for the first few years against competition, as a reward for the first enterprise.

BRIDGES.

WE went to look frequently at the several bridges of London, and beautiful structures they are; we cannot but regret that we could not insert plates of them, but we can give all particulars about them.

	Length.	Width.	Height.	Number of Arches.	Span of Centre Arch.	Materials.	Commenced.	Opened.
Old London Bridge . .	feet 230	feet 20	feet 40	19	70	Stone and Rubbish.	1176	1209
Altered by Sir R. Taylor	"	48	"	30	"	"	"	"
New London Bridge .	928	56	55	5	150	Granite.	March 15, 1834	Aug. 1, 1831
Westminster Bridge .	1066	42	58	15	76	Portland Stone.	January, 1739	1750
Hackfriars Bridge . .	1000	43	69	9	100	Portland Stone.	June, 1760	1770
Vauxhall Bridge . . .	809	36	"	9	78	Iron and Granite.	May, 1811	July, 1816
Waterloo Bridge . . .	1326	42	54	9	120	Cornish Granite.	October, 1811	March, 1817
Southwark Bridge . .	700	42	53	3	240	Iron.	September 1814	1819

LONDON BRIDGE, it will be found above, has five arches; they are what architects call semi-elliptic, and they are by far the largest of this description of arch ever previously erected. The middle arch has a span of 152 feet, and is 29 feet 6 inches above high water mark. The arches, on either side next to the centre arch, have each 140 feet span. The roadway is 53 feet wide between the parapets; and each of the footpaths occupy nine feet out of that quantity. The rise in the road is only 1 in 132. The bridge is all composed of granite, and there were 120,000 tons of that stone used in building it. To help the Corporation of London to defray the expense of building it, they are allowed, for 26 years, to charge a tax of 10*d.* per chaldron of 36 bushels, upon all coals enter-

ing the port of London. It was opened by the King in person, on the 1st of August, 1831, with a very grand procession. It cost very nearly, with the ground and houses they were obliged to purchase for the approaches, two millions of pounds, or sixteen millions of rupees. Some of the piles of English oak, which were driven in in the year 1176, were taken up in 1832, and Sir Edward Banks, who was the contractor for building new London Bridge, finding them as sound as when they were first driven, had several pieces of handsome furniture, tables, &c., made from them, which are now in the possession of his son Delamarck Banks, Esq., of the Isle of Sheppy, who is now, in 1841, the High Sheriff of Kent. We ourselves have a box presented to us by Mr. Baldock, the receiver of Chatham Dock Yard, made from one of the piles, and which was given to him by Mr. D. Banks.

WESTMINSTER BRIDGE is built of huge masses of Portland stone; few of them weigh less than a ton, while many are two, three, four, and some as much as five, tons each. The span of the middle arch is seventy-six feet. The bridge, and its approaches, cost £387,500. Government paid the whole of this. £197,500 was raised by lotteries, and the remainder was voted by parliament. There is supposed to have been twice as much stone used in this bridge as in building St. Paul's Cathedral.

WATERLOO BRIDGE, which it will be seen, is the longest of the bridges, being one thousand three hundred and twenty-six feet long, was built by private individuals, but we know not the cost; it was thought that the toll of a penny for each person passing, and a small sum to be paid for each horse or carriage passing, would well repay the proprietors, but it has not done so; even this small payment has induced the crowd to pass over the bridges where there is nothing to pay. At this bridge there is an ingenious contrivance by means of a turning stile, which registers the number of individuals that pass the bridge, and it is a great protection to the company against any impropriety on the part of the toll gatherers, who are answerable for the money received from the public, and which must be equal to the registered number.

We have learnt that the proprietors have resolved to reduce the toll to a halfpenny, instead of a penny, which is paid at present.

SOUTHWARK BRIDGE has also a toll, and belongs to a private company; it consists of three very large arches of cast iron; the span of the centre arch is two hundred and forty feet, and of the side ones two hundred and ten feet; the lower part is of masonry. This bridge also, we hear, does not repay the proprietors for the capital advanced. During the years 1839 and 1840 there have been public meetings in London

to petition parliament to vote a sum of money to give to the proprietors of these bridges, and to throw them open to the public free of toll, or failing in that, to raise by subscription, or by a local tax upon some article, a sufficient sum for the purpose. It would be a great convenience if these bridges were free of toll; for London and Blackfriars bridge are, at certain times of the day, almost blocked up with carts, omnibuses, and other carriages, a great many of which would go over Southwark and Waterloo bridges, but for the payment of toll.

VAUXHALL BRIDGE was the first iron bridge erected over the Thames; it cost upwards of £300,000. We have thus described at length all the history of the bridges, as we were very much struck with their beauty and their magnificence. On a very dark night, to stand upon Southwark or Waterloo bridge, and to look on both sides at the beautifully lighted up bridges, is a grand sight. And upon a fine summer's morning, to stand upon the centre of either of them to behold the glorious sun rise, and to see the gilding of the top of St. Paul's, and of the numerous high buildings that are visible from hence, is a sight that has been witnessed by few perhaps of the inhabitants of London, except those whose occupations require them to be up at that early hour. But we would advise those who wish to see London to advantage, to rise at four

o'clock some summer's morning, and they will see a beautiful view, there being then scarcely any smoke; and the great luminary of light will beam upon and illuminate every thing, and it will kindle in the human heart feelings of thanksgiving and praise to the great author of the universe. We could not refrain from asking ourselves where all the money could come from to build these bridges, and we were wondering what number of people London, and indeed, if it could be ascertained, all England, consisted of, to raise these immense sums. We therefore asked of a friend, if he could guess the number of living beings in England. He told us, that from 1801 parliament had directed every ten years an account of the population to be taken in every parish in England, Scotland, and Wales, by competent persons, and that they made a return of the same, which parliament printed, with their ages, and whether males or females, also the number of houses; and we find that the following are the numbers given for England and Wales in the years

1730,	1740,	1750,
5,796,000	6,064,000	6,167,000
1760,	1770,	1780,
6,736,000	7,428,000	7,953,000
1790,	1801,	1811,
8,675,000	8,872,980	10,163,676
1821,	1831,	
11,978,075	13,894,574.	

No actual dependence is to be placed on any except the last four; viz., 1801, 1811, 1821, 1831, as previous to this, there was no accurate mode of taking the census, as it is called.

The following table shews the population of the principal towns of England.

	1801	1811	1821	1831
London	864,845	1,009,346	1,255,694	1,474,069
Manchester, Salford and Suburbs .	94,876	115,874	161,636	237,853
Liverpool	79,722	100,340	131,901	189,344
Birmingham and Suburbs . . .	73,670	85,753	106,721	142,251
Bristol and Suburbs	63,645	76,433	97,779	123,086
Leeds	53,163	62,534	83,796	123,393
Plymouth, Devonport, and Stonehouse	43,194	56,060	61,313	75,534
Portsmouth, with Portsea and Gosport	43,461	52,769	66,620	83,026
Norwich	36,833	37,356	50,388	61,116
Newcastle on Tyne, with Gateshead .	36,963	36,369	46,948	59,937

When we see this immense population up to 1831, and which will be much greater when the population for this year (1841) is taken, we could not wonder at seeing bridges, churches, hospitals, or any thing else built, as a few shillings from every one would raise a sum of money of large amount.

The following number of acres of ground is the probable quantity in England and Wales, as stated in the third report of the Emigration Committee laid before the parliament.

	Cultivated Acres.	Uncultivated, but capable of Cultivation.	Unprofit- able.	Total.
England . . .	23,632,000	3,484,000	3,256,400	32,342,400
Wales . . .	3,117,000	530,000	1,005,000	4,752,000
Total . .				37,094,400

So that if it were requisite to lay a direct tax immediately to raise a large sum of money upon any sudden occasion, it might be readily done in two ways, either by calling upon every living human being in England to pay one or two shillings per year each, or to let the owner of land pay a shilling or two for every acre per year ; at the first appearance it would seem a hardship to tax the owners of the land but it would not in fact be a tax upon them but upon all the people who consume the produce of the land. For if a man now is about to hire a farm of land, he calculates so much for rent, so much for poor rate, so much for church rate, and then sells all his corn, or bullocks or sheep at prices to bring him his outlay back, with profit to live upon. And as it is necessary to raise a great deal of money in England for taxes, and for revenue in a duty paid upon timber, cotton, and every thing that comes into England, which is expensive in the collection, we think as much as could be laid upon land should be, as it is easy to collect, the produce would be certain, and but little expence to receive

it, and as wheat and other corn is not allowed to come into England from abroad without paying a very high duty to *protect, as it is said*, the English Landowner from the competition of the Landowners of Poland, Prussia, and America, it is no more than right that the Landowner should bear a great proportion of taxation; yet we see that upon looking at tables, that wheat has varied very much in price notwithstanding they have a fluctuating duty, in 1792 a quarter of eight bushels of wheat sold for 43*s.*, in 1800 for 113*s.*, in 1801 for 118*s.*, in 1803 for 56*s.*, in 1810 for 106*s.*, in 1812 for 125*s.*, in 1822 for 43*s.*, in 1827 for 56*s.*, in 1840 for 80*s.*, and this variation in the price of wheat, has no doubt been produced by the fluctuating duty to be paid for all wheat imported into England, which is as follows;

Whenever wheat is 62 <i>s.</i> per quarter of eight bushels and under 63 <i>s.</i> in the markets as declared by an average of the prices of all sold at all the markets in England - -				The duty to be paid for every quarter shall be	
				£.	s. d.
				1	4 8
Whenever 63 <i>s.</i> and under 64 <i>s.</i> per qr.				1	3 8
„	64 <i>s.</i>	„	65 <i>s.</i>	„	1 2 8
„	65 <i>s.</i>	„	66 <i>s.</i>	„	1 1 8
„	66 <i>s.</i>	„	67 <i>s.</i>	„	1 0 8
„	67 <i>s.</i>	„	68 <i>s.</i>	„	18 8
„	68 <i>s.</i>	„	69 <i>s.</i>	„	16 8
„	69 <i>s.</i>	„	70 <i>s.</i>	„	13 8
„	70 <i>s.</i>	„	71 <i>s.</i>	„	10 8

„	71s.	„	72s.	„	6 8
„	72s.	„	73s.	„	2 8
And whenever above 73s. per quarter					1 0

Now as by this mode of paying duty great inducements were held out to persons to speculate largely, and by selling from one to another on each market day large quantities of wheat at a *nominal high price*, to be purchased back again on the next market day, at a *much higher nominal price*, *the wheat in fact never being really sold at all*, the average prices which govern the duty are got up to above 73s. per quarter, and then hundreds of thousands of quarters of foreign wheat are liberated from bond at only one shilling per quarter duty. The revenue of the country is not materially benefited, and the growers of corn are seriously injured, as the holders of foreign corn, their speculation having been carried out, sell their corn which is very fine, and prevent the English grower from selling his, until prices have fallen by so much corn being in the market.

If therefore it is necessary to protect the English wheat grower by any duty, it should be a permanent fixed duty of a few shillings per quarter; and then it will not be worth while for the rich capitalists to speculate in buying up corn, and the prices would be more equal at all times.

CHAPTER VI.

WAX WORK—MADAME TUSSAUD.

Soon after our arrival in England we went to pay a visit to an exhibition of Wax-work Figures, in what was formerly a great horse and carriage bazaar in Baker Street, Portman Square, where there are a great many figures as large as life, dressed exactly in the costume that they are, or were, in the daily habit of wearing, and in all respects so exactly resembling living men, that when the room is crowded with visitors it is very difficult, at a very small distance, to distinguish the living real man from his waxen representative. Queen Victoria had been crowned as queen of England on the 28th of June, 1838, and in the centre of the room there was an exact representation of the group that actually surrounded her Majesty at the time. We have, since that time, had the honor and pleasure of seeing her Majesty, and we can bear testimony to the very strong likeness. A very venerable and good-looking old man, the Archbishop of Canterbury, who is the head of the English Church, is just about to place the

crown upon the head of the Queen. We are told his grace is a most correct likeness ; and if we are any judges of human countenances he is and must be a very good man. He looks so placid, so humble, that if he is not one of the greatest of hypocrites, he is a man who, by example as well as precept, would teach people to live properly that they may die happily, and after death go to that place where good men, whether Parsees, Christians, Hindoos or Mahometans, will all be in a state of happiness superior to anything which we can have upon earth. Surrounding the Queen are—her good mother the Duchess of Kent ; and if ever any individual ought to feel proud of a mother, Queen Victoria has reason to love, venerate and respect her mother. Although there did not appear much chance of her ever being sovereign, her prudent mother would not allow her to be made the stalking horse of any faction. She kept her aloof from every interference with public affairs, gave her a sound good practical education, directed her attention to a proper course of reading, and through her care and her sound discretion she was enabled, at eighteen years of age, to assume the sovereignty of England with a well informed and vigorous mind, and bids fair to prove the most popular individual that ever sat upon the British throne. How much, then, do the subjects of Queen Victoria owe to the Duchess of Kent for her wisdom

in thus rearing, thus fitting her daughter to assume with dignity, with discretion, and, better than all, with good sound common sense, the attributes and duties of a queen. Bearing the sword of state, near her Majesty's right hand, was her prime minister, Lord Melbourne; an exact representation of a good humoured-looking, kind English gentleman, possessing, perhaps, a countenance more representing frankness and candour than dignity. In the group is the Duke of Devonshire, one of the richest and most benevolent of the English nobility. The Queen's uncle, the Duke of Sussex, is also near her. He is very popular, mixing much in society, and presiding over meetings calculated to diffuse happiness and to encourage science. He was for many years President of the Royal Society, and is always happy when he can promote benevolent objects. The Duke of Wellington is also there; there is no mistaking his likeness; it is the very man himself. Yes, there stands—the hero—the general—the commander, who, with his master mind and high courage, marched triumphantly even to the very capital of his renowned enemy, Napoleon Buonaparte; and who, in the quiet times of peace, has immortalized himself by removing from the people of Ireland that mark of degradation, which had previously been imprinted upon every man who chose to worship his God as a Roman Ca-

tholic. To the Duke of Wellington belongs the high honor of having removed all those foul stains; and a Catholic now is eligible to sit in parliament, to hold offices of trust, and, in nearly every position, to possess the rights and privileges of his Protestant brethren.

In another group we were shewn Alexander, the Emperor of Russia; Frederick William the Third, King of Prussia; that extraordinary man and great general, Napoleon, late Emperor of France; Bernadotte, King of Sweden; Lord Nelson, the brave British admiral, who was killed at the battle of Trafalgar; Blucher and Platoff, Prussian and Russian generals; Marshal Ney, the celebrated French general, who was shot for his devotion to his unfortunate master, Napoleon and several others of great note.

At the upper end of the room we saw George the Fourth, his queen, Caroline, and she who was once the nation's hope, the Princess Charlotte of Wales, daughter of George the Fourth and Queen Caroline; she married Prince Leopold of Saxe Coburg, uncle to the present Queen and brother of the Duchess of Kent, and now King of the Belgians. She unfortunately died in giving birth to a child, who also died at the same time. William the Fourth and his queen, Adelaide, are also there. He looks the very picture of good nature, and in after time he will fill an important niche in British history from having

passed the Reform Bill. Previous to his being King he was for some time Lord High Admiral of England, or, in other words, he filled the highest office at the head of the naval administration of affairs, commonly called the Admiralty. He was brought up a sailor, having at an early age gone to sea as a midshipman and as a lieutenant. He had a large family prior to his marriage, having lived for many years with Mrs. Jordan, a first-rate actress, who performed on the London stage several years, whilst living under his roof. Standing close by each other were Lord John Russell and Sir Robert Peel; admirable likenesses of the two great men, who are the leaders in the House of Commons of the political parties called Whigs and Tories. We also saw a first-rate likeness of Mr. Daniel O'Connell, a member of parliament, and the man who has attracted much attention by the conspicuous part which he always takes in any matters connected with Ireland, which he constantly describes as being harshly dealt with. He is paid very largely for his exertions by an Irish contribution called "Rent," to remunerate him for having given up his practice as a barrister. Lord Brougham is also here. He is the man, who, as plain Henry Brougham, member of parliament, was always the advocate for the diffusion of useful knowledge, and who has immortalized himself, if he had never done anything else, by writing the introductory pamphlet to the Library

of Useful Knowledge. It is called the "Objects, Advantages, and Pleasures of Science;" it shows how gigantic is his mind, and the general knowledge that he possesses. He was the Queen's (Caroline) counsel when she was tried in the House of Peers, and in conducting her defence made use of such strong remarks upon the conduct of her husband, George the Fourth, then the reigning sovereign, that the King never forgave him; notwithstanding which his talents and popularity were such, that in the next reign he became the Lord Chancellor, the highest dignity that any individual can arrive at, being the keeper of the King's conscience, and the head of the law. Since he has been a peer he has not been so popular as when he was plain Mr. Brougham. He has not held any office for a number of years, and by his friends it has been a source of regret that he ever was made Lord Chancellor.

Wilberforce is there; who has not heard of Wilberforce? he was the champion of the poor slave. He it was who for a series of years denounced the slave trade, and told of the horrors of West Indian slavery; and who, by his assiduity and dauntless zeal, first annihilated the slave trade, and at length knocked off the fetters of the wretched slave. There are two wretched-looking men, named Hare and Burke, whose villainous looks cause you to shudder. They gained a livelihood for a long period by decoying persons

to their residence, giving them opium in their drink and then smothering them, to sell their bodies to surgeons for dissection; they were apprehended, and were put out of this world by hanging. Close by the entrance is a likeness of that extraordinary individual, Fieschi, with the machine with which he attempted to destroy Louis Philippe, the present King of the French. The machine consists of a number of barrels, twenty perhaps, all of which he loaded with gunpowder and bullets, and fired as the King was just passing his residence; an accidental stoppage of the procession saved the life of the King; several of the nobility and soldiers who were accompanying him, and who were close to his person at the time were severely wounded.

There was, opposite to him, a very laughable representation of a very favorite actor of comical characters, Mr. Liston, in a character called Paul Pry, which amused us much. We should have mentioned that Fieschi, who is represented as standing up and looking at the machine, is so constructed as to gradually keep his head in motion, as if he were very minutely examining the barrels; and so much is he like a living man, that several persons have enquired of him the nature and intent of that which seems so much to occupy his attention. Seated on one of the long forms placed for the accommodation of the visitors, is a wax representation of that extraor-

dinary man, William Cobbett, a great political writer. He, Cobbett, is one of the numerous instances of which we have heard, of men from the humblest rank in society rising by talent alone and unaided, to wealth and distinction. Cobbett was the son of poor parents, and had but a very indifferent education, and was induced by poverty to enlist as a common soldier. He, however, took great pains with his education, and became the writer and printer of a weekly political periodical (the Register), which was constantly attacking the acts of government. He published an English and French grammar, said to be the best of its kind, wrote a history of England, and many other volumes of books, and at last became a member of parliament. To prove how very closely he is in appearance to an animated being, a gentleman with whom we became very intimate told us that he went with a friend to see the exhibition, and being himself at first deceived, thinking Cobbett was alive, he sat himself down alongside of the figure (which also keeps his head constantly moving, as if looking at the group of foreign princes in front). He, of course, preserved his gravity, and kept his features quite still. He wore spectacles, and endeavoured to imitate the motions of the figure. He had not sat long before a gentleman and lady took their seat by Cobbett's figure, and the gentleman asked of it, who the persons were in the inclosure in

front; upon receiving no answer he whispered to his companion, "It is not a man, it is a figure;" she said, "Oh, yes, I knew that, and so is the next to him;" immediately upon which, to test her judgment, the gentleman asked a question of our friend, and upon not receiving an answer, went to some of the spectators, and asked who those two figures were. This drew the attention of several of the spectators to them, and after they had looked for a few minutes, our friend put his hand suddenly in his pocket, took out his catalogue, got up and walked away as if he was innocent of the deception, and a loud and unusual burst of laughter was produced. The best time to see the exhibition is when it is lighted up in the evening, as the countenances look more natural then. The music which is played here is very pleasing, and generally there is a very great concourse of people. The dresses are very good.

We paid a second visit, after the marriage of the Queen, and we then saw a group of figures, representing those who were present on the 10th of February, 1840, when her Majesty was married to her cousin, Prince Albert of Saxe Cobourg and Gotha. He would not be twenty-one years of age until the 26th of August in that year, and she would be twenty-one on the 24th of May in that year. His Royal Highness' likeness is very good; they are both looking very happy; he has every appearance of being a good kind-hearted

man. He has a very small moustache, which is very becoming to him. Queen Adelaide is in the group, and Prince Albert's father and brother. The Queen's favorite uncle, the Duke of Sussex, is also there, in capacity of father, to give her away; there are several beautiful women of her household about her person, but the Queen and Prince Albert of course engage the attention of spectators. There is scarcely any body who has attracted the attention of the public, but what is to be found here. It may, perhaps, amuse some of our own countrywomen to know how the Queen was dressed: she wore on her head a wreath of orange blossoms and a lace veil, with diamond ear-rings and necklace. Her gown was of white satin, with a great deal of beautiful lace, and with orange blossoms all over the body and train. The cost of the lace alone was £1000; the satin was made in London in Spitalfields, where a great number of silk weavers live. As the Queen could not wear, so as to exhibit it, the order of the Garter, where it is usually worn by males, she wore it upon her arm, with its motto of "Evil be to him who evil thinks;" and she also wore the star of the order.

We saw at this exhibition William Pitt and Charles James Fox, whose names are familiar to every one who knows anything about the political history of England; they having, for very many years, been the leaders of the parties known as

Whigs and Tories. There is a group which seems most attractive to young people, which is Louis the Sixteenth of France, Marie Antoinette, his queen, and their young son, commonly called the Dauphin, or next heir to the throne. The King and Queen, it is well known, were beheaded by their subjects in the Revolution at the end of the last century. There is also a representation of a very beautiful woman, who is lying at full length on a bench, and who is represented as being sleeping, and who, from her chest heaving, and the apparent actions of a person whilst slumbering, is often taken for reality.

There is also Voltaire, the French political writer, and a man who thought very differently from many of his neighbours with regard to religion, and who was called an Atheist, because he promulgated opinions which were opposed to the Catholic Religion. In India we have heard much of him, and we are informed he worshipped one God, and his revilers three, or what they call Trinity, and that they should have named him Deist instead of Atheist. He is an extraordinary looking man, dressed so oddly too, with little pinched-up features, and his hair so curiously arranged. We looked much at him, thinking he must have had much courage, and have thought himself quite right in his belief to have stood opposed to all the existing religious systems of his native land. He, however, and those who

thought differently from him, have long since, in another world, experienced that *if men only act up to what they believe to be right*, that the Maker of the Deist, the Christian, and the Parsee, will receive them into his presence; and that it is the *professor* of religion, *who is nothing but a professor*, let his creed be what it may, that will meet with the greatest punishment from Him who ruleth all things.

We have said much about Madame Tussaud's Wax-work, because we were very much pleased; and we know of no exhibition (where a person has read about people) that will afford him so much pleasure, always recollecting that it is only *one shilling*, and for this you may stop just as long as you feel an inclination. We saw a wax-work figure of Madame Tussaud herself in the exhibition, and when we saw her alive upon leaving the room, we could scarce discover the real from the imitation.

CHAPTER VII.

RAILROADS. EGHAM. WINDSOR.

WE were apprehensive upon our voyage that we should have had some difficulties in retaining our customs, which our religion as Parsees call upon us to do.

We are accustomed to have our food cooked by one of our own caste, and we require private apartments to perform our devotional duties, and we thought we should have met with some trouble to carry on these things, but in the Portland Hotel, and every other inn and lodging house, where we subsequently lodged, we found every convenience, every comfort, and we and our servants were allowed unmolested to do every thing we required.

Neither did we in the course of our residence in England among our numerous acquaintances, find one who condemned our religion or ridiculed its ceremonies; on the contrary, many of them who knew that we could not partake of their hospi-

tality for reasons above alluded to, took great pleasure in entertaining us in every way conformably to our manners and feelings.

We came to England by the "Buckinghamshire" Captain Hopkins, we were now desirous to procure a thorough knowledge of the English and mathematics, and were anxious to place ourselves under a tutor who would instruct us, and a brother of Captain Hopkins, a clergyman, who preached at a small village called Wraysbury, in the county of Buckinghamshire, and who lived at Egham, undertaking to instruct us, we went by the railroad to see him, and to look at a house which it was thought would suit us. And if we had been astonished at the several description of carriages that we had seen, how shall we describe our very great astonishment at what we saw on the railroad? It was called the Great Western, and it leaves London at Paddington, opening a way to the western coast of England, and is intended to run to Bath, Bristol, Gloucester and Cheltenham.

We travelled to a place called Slough, twenty-five miles, in fifty minutes. Only think, within an hour, seated quietly in a beautiful carriage, we were twenty-five miles from London! We did not feel that we were passing so rapidly through the country when we looked at distant objects, but when we looked upon anything near to us, we but saw it and it vanished, and when the other train of carriages passed us, it was almost as if a flash

of lightning had gone by, we could not distinguish any one of the carriages. But what is the train? And how is it moved? We will endeavour to explain all this;—we have read,

“ When railroads were in their infancy, it was
 “ a puzzle how to contrive means, not to make the
 “ wheels of the carriage *turn round* but to make
 “ them *move onwards*; for it was imagined that the
 “ smoothness of the rails, would permit the wheels
 “ to slip, and that thus though they would revolve,
 “ they would not go on. Many ingenious con-
 “ trivances were made to overcome this imaginary
 “ difficulty, amongst others a most ingenious pair
 “ of metal legs were to push the carriage onwards.
 “ But at last it was found out that rails and
 “ wheels were not so smooth faced to one
 “ another, and there was friction enough between
 “ them to let the carriages run. Then came the
 “ question of how are the carriages to be moved?
 “ Shall we pull them by horses? Or build
 “ stationary engine houses and haul away with
 “ ropes? Or drag by locomotives? The decision
 “ on the Manchester and Liverpool Railway, the
 “ earliest of the great railroads, was in favor of
 “ locomotives, and so locomotives have become
 “ the prime moving power on railroads.”

Locomotive engines are so named, because they possess the power of moving from place to place. They consist of a strong iron frame supported on four wheels, and a cylindrical boiler made of

wrought iron plates, which is fixed to this carriage ; the chimney is in the front and the furnace at the hinder end ; the smoke and hot air pass through a number of brass tubes which traverse the lower half of the boiler, on their way to the chimney, and which at the same time communicate additional heat to the boiler, to generate steam ; the cylinder in these engines is placed almost in every variety of position, as vertical, horizontal, and inclined. The engineer stands on the hinder part of the carriage and by a long rod moves the throttle valve for admitting the steam into the cylinder, which regulates the motion and consequently the speed of the carriage, to prevent ignited fuel escaping into the air and doing mischief, a wire netting is placed on the top of the chimney. A carriage called the tender with coke or welsh coal, and water, is following the engine or the steam carriage ; this supplies the furnace and boiler with their necessary food ; this engine will take twenty carriages, loaded with passengers with their luggage, at the rate of thirty miles an hour, if required, and with only common caution there is little fear of accident. The carriages for passengers are of two kinds, those for the first class are fitted up beautifully with cushions and glass windows, they hold three persons on each side, and the seats are detached from each other, and on some railroads they have a lamp inside for night travelling. The second class carriages are

fitted with benches and are only covered at the top. The place from where the train started, is covered with a magnificent and commodious roof with suitable apartments for passengers. The iron rails on this line are placed at the distance of seven feet apart (while the distance in other lines is four feet eight inches) and are laid lengthways on continuous bearings of wood, which we are told is a deviation from other railroads, and for which innovation Mr. Brunel, the chief engineer met with a great deal of opposition.

In going from Paddington to Slough, we saw more than fifty bridges, either over or under the line; the distance between London and Bristol is one hundred and twenty miles, and this gigantic work will cost about 50,000,000 of rupees when completed; the train carries more than six hundred passengers daily, but the number since has increased to three thousand, and the weekly receipt at present amounts to £2000 sterling.

In a commercial point of view, this railway will bring Ireland and London nearer each other, independent of the facility it will afford in conveying colonial produce from Bristol to the metropolis. A writer in speaking of railroads, thus describes them in the *London Saturday Journal* :—" You
 " bid your friend good night and fancy that
 " like yourself he will go to supper, and to bed,
 " and that next day he will revisit his accustomed
 " haunts, with beard neatly trimmed, and a clean

“ sweet neckcloth round his neck, but he, after
 “ coolly giving you the countersign for the night,
 “ walks to Euston Square, throws himself into a
 “ carriage, and in the morning has tea and a kidney
 “ at Liverpool ; and while you have been slumber-
 “ ing on that faithful bed, which has nightly
 “ received your precious body for half a century,
 “ he has been sweeping through hills, under
 “ bridges, over rivers, along valleys, in fact, quietly
 “ going through adventures which exceed the
 “ wildest of your dreams, now ploughing his way
 “ in the darkness of a tunnel—now rushing be-
 “ tween walls of chalk, while high above aerial
 “ bridges look like the perches of fairy land—now
 “ rattling along a viaduct, while the placid stream
 “ below still wanders at its own sweet will—now
 “ toiling onwards in a delightful valley, startling
 “ the cattle asleep in the field, and almost scaring
 “ away the quiet church of the hamlet ; the day
 “ after your friend, who has been floated some five
 “ or eight hundred, or even a thousand miles of
 “ hill and dale, takes his seat at his desk with a
 “ provoking equanimity which would not have
 “ been tolerated a few years ago if one had only
 “ taken a half holiday and gone to Hornsey Wood
 “ House ; time was indeed, when the public were
 “ used more frequently to walk, and Islington or
 “ Primrose Hill constituted an excursion worth
 “ talking about ; time was when coaches had no
 “ springs, and roads were full of ruts, and my Lord

“ Mayor’s lumbering machine was the pink of
 “ elegance and grandeur ; time was when fair
 “ ladies were carried in sedan chairs and could
 “ modestly draw the curtains, lest the torches of the
 “ link boys should glare too rudely on their beauty ;
 “ time was when the mail hobbled on a sorry nag,
 “ and a miserable post boy was at once carrier and
 “ guardian ; time was when hackney coaches were
 “ few, and the Thames watermen flourished, and
 “ cabriolets were unknown, and omnibuses were
 “ not. Aye, and time was, and that but yesterday,
 “ when our level roads, our picturesque mail
 “ coaches, and our country inns were thought the
 “ summit of perfection, and made us the envy of
 “ surrounding nations, and the admiration of the
 “ world, but all that is passed or passing, for the
 “ inspiring blast of the guard’s horn we have the
 “ shrill whistle of the locomotive ; for change of
 “ horses, we have merely a supply of coke and
 “ water, and for “ John” the ostler, and “ Mary”
 “ the chambermaid, and “ William” the waiter,
 “ with cold beef, bread and cheese, and glasses of
 “ ale ; we have policemen and porters all as like
 “ one another as peas, while the stomach has to
 “ be stayed by a hasty stare at a station house,
 “ above all, one sadly misses the driver, at once so
 “ conceited and so cool, now praising his team, or
 “ quizzing a passenger—now touching his hat for
 “ the expected half crown, and sneering when it
 “ proves only a shilling. As for the scarlet

“coated mail guard, he was always too important
 “to get very familiar with, the man felt that he
 “had a post office time piece in his pocket, and
 “was serving his king at the rate of ten miles an
 “hour. Ten years ago, railroads as a means of
 “general transit for passengers and goods were
 “almost untried, now they are spreading over the
 “country like a net work ; about one hundred and
 “fifty railroads are already in use in Great Britain
 “and Ireland, and upwards of sixty millions of
 “money are invested in them ; they are upsetting
 “all our former notions, and altering our social
 “condition—they are pouring the country into
 “London, and spreading London over the coun-
 “try ; Northward, we are carried as far as
 “Lancaster, a distance of two hundred and forty-
 “one miles from London, in eleven or twelve
 “hours by the London and Birmingham, the
 “Grand Junction, and the continuation to Pres-
 “ton and Lancaster ; where though for the pre-
 “sent it stops, there will probably be a con-
 “tinuation to Penrith, to Carlisle, and Glasgow ;
 “the same lines, the London and Birmingham,
 “and the Grand Junction, link with Liverpool
 “and Manchester, at Rugby, eighty-three miles
 “from London, on the London and Birmingham
 “railway. The Midland Counties Railway carries
 “us to Nottingham and Derby, and at Derby, we
 “can get by the North Midland and its Junctions,
 “to Chesterfield, Sheffield, Leeds and York, or

“ instead of going on to York, we may double like
 “ a hunted hare, turn off to Hull by Selby, or
 “ from Selby to Leeds. At York, the Great
 “ North of England Railway now in progress, will
 “ carry us on to Durham and Newcastle, and at
 “ Newcastle we can cross the Island to Carlisle.
 “ Returning to London, we find the Great
 “ Western Railway opening to us the western
 “ coast, and by it and its junctions, not only
 “ enabling London citizens to spend a day com-
 “ fortably at Windsor, but joining Bristol and
 “ Bath, Gloucester and Cheltenham, either now
 “ or shortly. The south coast again is almost free
 “ to us by the Southampton and the Brighton
 “ railways, along with the Greenwich and its
 “ adjuncts, to Croydon and Dover, all either
 “ made or making. Again, the north east coast is
 “ accessible by the Eastern Counties railway, to
 “ Ipswich or Norwich, and all who wish to avoid
 “ the intricacies of the London portion of the
 “ Thames, called the pool, or who are in a hurry
 “ to reach a dinner of white bait, can be whirled
 “ from the city to Blackwall by the Blackwall
 “ railroad.

“ The locomotive steam engines are high
 “ pressure engines, no vacuum is produced in the
 “ Cylinder, and therefore the whole of the con-
 “ densing apparatus, the cold water cistern, con-
 “ denser, air pump, cold water pump, &c. are
 “ dispensed with, and nothing is retained except

“ the boiler, cylinder, piston and valves ; by this
 “ means, the locomotive is rendered light and
 “ portable, but at the same time there is required
 “ the action of an intense heating power within a
 “ small compass. The railroad from the City of
 “ London to Blackwall, though a short one, is an
 “ interesting one, from the admirable system
 “ adopted, no locomotive engines are used, the
 “ trains being pulled by ropes, moved by sta-
 “ tionary engines, at each end of the line. Though
 “ the line is a short one, there are several inter-
 “ mediate stations where passengers get out and
 “ in, and when a train starts from London it pro-
 “ ceeds in the following order, each station having
 “ its own carriage and each carriage its driver.
 “ The carriage for Blackwall goes first, then the one
 “ for Poplar, the one for the West India Docks,
 “ Stepney, &c. the carriage for Stepney being the
 “ nearest station to London goes last, and as the
 “ train approaches the Stepney station, the driver
 “ turns his carriage off, while the rest of the train
 “ goes on without stopping, thus carriage by car-
 “ riage is turned off, the rest proceeding unchecked,
 “ and the intermediate stations being all passed, the
 “ Blackwall carriage arrives alone, and with as
 “ much rapidity as if it started singly, danger of
 “ collision is thus rendered impossible, and a
 “ whole train of carriages is not placed at the
 “ discretion of a single man, as in the case with
 “ trains drawn by locomotives. There is also an

“ electric telegraph, by which constant and almost
“ instantaneous communication is maintained be-
“ tween the termini, and a casual question being
“ asked in the London station house will have an
“ answer in a few seconds from Blackwall, the
“ length of the railroad being nearly four miles.”

It may not be amiss here to mention that upon the great railroads, the London and Lancaster for instance, there is a travelling post office in which the bags of letters are received from the several post towns and are sorted immediately by one or more clerks and the several bags of letters sealed up and delivered as they pass along : the post office travelling upon the Birmingham railroad cost £600. it is fifteen feet, three inches long, seven feet, seven inches wide, and is six feet ten inches in height, the carriage is fitted internally with nests of pigeon holes to receive the letters as sorted, with drawers, desks and pegs and is divided in the middle by a partition, and the guard and mail bags that are to go through are in the hindermost part, the clerks keep on sorting and arranging the letters during the journey, and the guards tie up and exchange the mail bags. A Mr. J. Ramsay contrived the following ingenious process, by which the bags of letters are received and given out, without stopping the train or slackening the speed, for this purpose attached to the near side of the office is an iron frame with a piece of net, which is expanded as they approach

a post office station to receive a bag from the arm of a standard at the side of the road, at the same moment that a bag is delivered into the net, another is let down from the office by the machine; and thus an exchange of bags is instantly effected. The speed of the mail trains on the Birmingham railway, is as follows, from London to Birmingham five hours, a stoppage of eight minutes is allowed at Tring, ten minutes at Wolverton, three minutes at Weedon and nine minutes at Coventry; making a total of twenty-five minutes occupied by the stoppages, and only four hours and thirty-five minutes in performing the journey of one hundred and twelve miles and a quarter; according to the Parliamentary report the price for conveying the mails on the London and Birmingham railway, is settled by arbitration, namely from the first of May, 1839, at £24. 4s. and 4d. per day, or £10,340. per year, for a day mail up and down, and a night mail up and down, for this the contractors provide the post office carriages and convey each trip a guard and two clerks; the contract is for three years and the weight carried nearly ten tons.

We have written a long article upon railroads and we have only got as far as Slough in our way down to Egham. We walked with our friend Captain Hopkins to his residence at Maidenhead, is was a neat small cottage, and which we should call a Bungalow, with the

River Thames on one side and a beautiful piece of garden on the other. The situation was very lonely but pleasant, the English are particularly fond of such quiet and rural habitations, and here they generally contrive to amuse themselves by gardening, growing vegetables, and fruits for their own use, and flowers to adorn and beautify the place, and render it cheerful by their various and beautiful colours ; many, even as gentlemen living independently, dig the ground with their own hands, and in fact go through all the duties of a gardener merely to pass away their time. Having taken some refreshments at our friend's house we had a post chaise and went to Windsor ; the castle has for very many centuries been the residence of the Kings and Queens of England. It is in Berkshire, twenty-one miles west of London. Windsor Forest is fifty-six miles in circumference, the Great Park contains near four thousand acres and the Little Park about five hundred acres of ground. The castle is upon an eminence commanding a fine view of the Thames, and is surrounded by a terrace extending nearly two thousand yards, it has within the last twenty years had immense sums expended upon its alterations, and is now a palace which has no equal in the world for magnificence and convenience. The long walk in the Park is considered the most beautiful thing of its sort in Europe, a perfectly straight road runs from the principal entrance of the

castle to the top of a commanding hill in the Great Park, called Snow Hill, a distance of more than three miles; upon each side of this walk or road is a double row of fine old elm trees but they are passed their prime and in a few years will decay and be blown down.

It will no doubt strike the mind of those whose business it is to attend to this matter, at once to plant others, that when in the course of nature these trees have disappeared others will spring up and take their places. It is very beautiful to look along this immense straight road with its beautiful fringe of vegetation; and upon the hill, at the end of the walk, the prospect is of vast extent, and embraces a highly interesting district. Windsor Castle is at the feet of the beholder; on the left is beautiful forest scenery; to the right runs the Thames towards Richmond; on whose surface you will see the light pleasure boats gliding along with parties, who have quitted London, and its smoke and noise, to have a little pure air—to unbend the mind—to behold the varied and beautiful scenery which is to be so much admired all the way from London. And oh, how diversified is that which meets the eye from the summit of this hill! We can, in the different glimpses which we catch of the Thames, see the small steam boats which are constructed for passing through the numerous bridges, decorated with their gaily floating flags with which they

are dressed, and bearing hundreds of happy beings to have a day's pleasure. Previous to Gravesend becoming the place of resort which it has done within the last few years, in consequence of the cheap and excellent accommodation afforded by the steam vessels, all these parts used to be weekly inundated by visitors; but now it is the quieter resort of many happy groups, who, with their provision in their boat and with a few chosen friends and the members of their families, thus rationally contrive to have a day of recreation and of happiness.

About the year 1831, a very large equestrian statue of the King on horseback (George the Third) has been erected on the highest part of this hill; it is at the end of the long road from the Castle, and is to be clearly seen all the way; it is placed upon stone work like a huge rock, of twenty-four feet high, and the horse and man are twenty-six feet high, thus being fifty feet above the road. We are told by those who knew George the Third, that it is very much like him; he is not, however, dressed as an Englishman, and we, as foreigners, should have taken him for some Roman figure, similar to those in the British Museum. We understand the sculptor, Mr. Westmacott, thought it would make a better figure than if in the uniform, cocked hat, and large boots, which King George the Third wore. It may look better, perhaps, to the eye; but the

grand object, of handing down the name and memory, the likeness, and the costume of the age in which he lived, is thus quite lost.

We then proceeded to Egham, saw the house selected for us by our tutor, which we approved of; and having arranged about what we should require, we looked out at the quiet little unobtrusive village, which was to be our residence, until we should feel that we knew enough of mathematics and English beneficially to study the writers upon ship-building and the displacement of bodies, so that we might advantageously judge from theory, and combine with practice, all that we should see, hear, and read upon the noble science of constructing a ship. Our arrival in this quiet spot with our Eastern costume created quite a sensation; all the people were gazing from their doors and windows at us; and, for a short period, we were looked upon quite as curiosities. Our tutor, the Reverend Mr. Hopkins, gave us always whilst we were with him, valuable assistance and advice; we received much kindness from him, and we thus express our entire satisfaction of the treatment we always received, and the information we gained, from him. Having settled ourselves down at Egham on the 28th of September, 1838, where we studied very regularly for a twelvemonth, it is not our intention to treat of anything that we saw in the order in which we viewed it, but we shall endeavour to describe all and every thing

that we have seen at different periods, when we gave ourselves a little recreation ; and our readers must bear in mind that we did not go by chance to see this thing or that, but whenever we read a description of places worth seeing, or if any of our friends hinted that it was proper for us to visit certain places, we endeavoured so to do. We cannot for one moment imagine that our impressions, or description of what we saw and felt, will either instruct or amuse English people ; but we do think many of our own countrymen, both Parsees and Hindoos, will be amused at hearing of what we saw in England ; we may as well state here that we have confined ourselves strictly to truth ; and if we have put a wrong construction upon anything that we have described, it has been for want of knowing better. We hope, in our little journal, any remarks we may make, may not be of that nature to give pain to any one. We have endeavoured to avoid all personal remarks ; and when we speak of any sect, we mean our observations to apply generally, and not to individuals. We have, in our long stay in England, had much to make us attached to it. We have received friendly kindness from many, and have formed some friendships that on our side will cease but with our lives ; we have received courtesy from a still greater number, and we shall ever think of England with sentiments of esteem and admiration.

CHAPTER VIII.

BRITISH MUSEUM.

WE paid a visit to the British Museum, in Montague House, Great Russell Street, near Russell Square, it was opened to the public in 1759. It appears that a celebrated physician, Sir Hans Sloane, had collected an immense quantity of books, manuscripts, and objects of curiosity, and in his will after his death, it was directed, that all these things should be offered to the British government for £20,000 to form a public Museum. This offer was acceded to, and thus was commenced this grand collection of books, specimens of minerals of all descriptions, of stuffed animals and curiosities from all parts of the world. There was soon added a large library, called the Cottonian manuscripts collected by Sir Robert Cotton, and then a library belonging to Major Edwards. George the Second presented a library of books, which the kings of England, from Henry the Seventh, had collected; and King George the Fourth, in 1823, gave all the books belonging to

his late father George the Third, supposed to have cost £200,000. There are also the Lansdowne, and the Burney, and the Macintosh manuscripts, and by the law of publishing, a copy of every new book is obliged to be given ; so, that, as a library, there never was in the world any place where so much information was collected together.

And any person may obtain admission, either to read or to copy out anything he may wish.

Any individual wishing to become a reader has to apply in writing to the chief librarian, and must have his application signed by some known person.

If the person recommending the party is known, immediate admission is granted, otherwise they have to wait a few days until enquiries are made, and this is done to prevent disreputable persons from getting in. When the person is admitted he receives a ticket for six months, and at the end of that time it must be renewed. General visitors to the Museum are not admitted to the library or reading rooms as they would merely see the out-sides of an immense number of books, and would only disturb those persons who come to study or to copy out such matters as they may require.

In the Museum, there is every thing that is curious ; there are several Mummies, specimens of Hindoo sculpture, Burmese Idols, several Arabic inscriptions on columns, there are large Egyptian statues brought home by Belzoni the

traveller, particularly Memnon's head. There are Obelisks from Cairo, covered with Hieroglyphic characters. There are also fine specimens of stuffed animals, there are two Giraffes or Cameleopards of immense size being eighteen feet high, and a Musk Ox ; there are also a collection of the Marble sculptures from Athens, brought home by Lord Elgin and bought for £35,000, in 1816. One of the most beautiful things is the beautiful Portland or Barberini Vase, its height is ten, and its diameter six inches, the material is a dark but transparent blue substance, upon this the figures are formed of a white substance ; it is difficult to say how they are united ; it was discovered about the middle of the sixteenth century enclosed in a marble sarcophagus, supposed to have held the remains of the Emperor Alexander Severus, near Rome. The Duke of Portland bought it of Sir William Hamilton.

On the first floor the room is surrounded with glass cases, with curiosities from the South Sea Islands, and the dresses of the Esquimaux who live near the North Pole. Here are rude spears, arrows, and harpoons ; in the centre of the room are glass cases with magnificent shells, beautiful, and arranged in nice order.

In another room collections of dried plants of nearly all known sorts, and then a collection of English fossils, and in another room, carefully preserved in cabinets, are specimens of nearly all

known sorts of insects ; then there is a large collection of Seals, Vases, and Hindoo Bonzes, then there are several rooms full of all sorts of animals, birds, beasts, fishes, stuffed so as to look just as if they were alive, very large Bats, Monkeys of all sorts ; there is a curious animal called *Ornithorhyncus paradoxus*, which has the bill of a Duck upon the hairy body of a four-footed animal, it is half beast, half bird, from New Holland ; where things are quite unlike any other place, they have animals, half bird and half beast, and they have timber half Fir and half Beach, called Cowdie.

There are beautiful specimens of Goats, Deer, Antelopes, immense Serpents called Boa Constrictors, Eagles and Hawks of all sorts and sizes, and then all the British Birds, the Lark, Bulfinch, Thrush, Goldfinch, Titmouse, and great numbers of other Birds of England. It is neither our wish or intention to offer a catalogue description of any of the sights of London, we only wish to inform our countrymen of what is to be seen in this mighty city, and if we had seen nothing else but the British Museum, we should have said how happy is the country possessing such an establishment ; for here poor as well as rich are constantly admitted. Every thing is so well described, there is no charge allowed to be made for seeing it, and here are to be found books treating upon every possible subject, shells and

geological specimens of every description, ores and stones from all parts of the world, dresses and costumes of all the rude natives, and their implements of war, &c. &c., birds and beasts stuffed so as to resemble life, and we could have spent whole days in examining the several objects contained herein. The English may well pride themselves in possessing this magnificent Institution ; it reflects great credit on them for here is laid open a most extensive field of learning, where every lover of knowledge has access without any expense, and thousands of books before him, to store his mind with information—in fact he can here satisfy his curiosity in every natural, and artificial object.

CHAPTER IX.

THE PARKS.

THE extent and beauty of the Parks of London, at once struck us and impressed us with the magnificence of the city, said to be the first in the world.

ST. JAMES'S PARK.—The oldest in the Metropolis, was so called from St. James's Palace being at its north side. Henry the Eighth found a rude marsh here, caused it to be drained, pulled down an ancient Hospital called St. James's and built the Palace of St. James's; Charles the Second caused the trees to be planted and had aviaries for birds in that part now called Bird Cage Walk. You can enter by the Horse Guards in Whitehall Street, there are entrances also by Hyde Park Corner,—in all we believe eight entrances where sentinels are on duty, the public who are freely admitted have only this restriction not to pull the trees; the Treasury, Admiralty, and Horse Guards look into this park; you may walk many miles in it; Queen Victoria lives here in a fine house originally old Buckingham House, but which has been nearly rebuilt and is now called Buckingham

Palace. A large statue on a high pillar of the late Duke of York looks into this park; it is near where the Palace of George the Fourth stood, called Carlton House, now pulled down.

THE GREEN PARK goes up to Piccadilly, it is all surrounded by iron railings and a great number of the houses of the nobility look into this park on the western side; there is a large sheet of water in it and upon a high part called Constitution Hill there is a good view of Buckingham Palace, St. James's Park, Westminster Abbey and the hills of the counties of Surrey and Kent, you may every day see a great number of beautiful carriages, handsome horses and persons of all sorts in large numbers walking.

HYDE PARK contains four hundred acres, and as you enter it from the upper end of Piccadilly, at the south east corner, close to the house of the Duke of Wellington, is a large figure called Achilles, put up in honour of the Duke of Wellington and those who fought with him; it weighs thirty tons and was cast from cannons taken at the battles of Salamanca and Waterloo. There is a small river called the Serpentine, which is very pretty for London, it adjoins Kensington Gardens, which is also a park laid out in flower gardens; in Hyde Park the soldiers are reviewed and they have sham fights. No stage coaches are admitted in Hyde Park, the road through this park towards Kensington is called Rotten Row, and here on most days from three until five o'clock,

Her Majesty with her suite and all the fashionable people in London, including the nobility, are to be seen either on handsome horses or in magnificent carriages moving steadily along and nodding to each other, and on Sundays from two until five in addition to all the carriages and horses, thousands of well dressed people of both sexes may be seen walking: there are five entrances open from sun-rise until nine at night.

THE REGENT'S PARK is considerably more to the northward and has enclosed about four hundred and fifty acres. This park has all around it magnificent houses looking into it, built in every varied style of architecture. At the south end is an immense building called the Coliseum which we visited and will describe at length as it deserves; at the end of the park is the Diorama, which we have described, and the Zoological Gardens are also in Regent's Park which we have before noticed; we consider these parks as most conducive to the health of the inhabitants of London. All these parks are inclosed in by iron railings with handsome gateways and they are infinitely superior to the Esplanade at Bombay, the only place of resort for the public near that city; here is to be found pure air, healthful exercise can be taken, and here at certain hours every day, more wealth, more respectability, more beauty, is to be seen collected in one spot than is to be found congregated in any other part of the world.

CHAPTER X.

THEATRES.

THE ITALIAN OPERA.—We were sent by our kind friend, Sir Charles Forbes, to the Italian Opera House, called the Queen's Theatre. It is situated at the corner of the Haymarket and Pall Mall, and is considered the most splendid of all the London Theatres; and the richest and most fashionable of the inhabitants of London are to be seen within its walls. The boxes will hold nine hundred persons, and the pit and gallery eight hundred each, thus two thousand five hundred persons can be accommodated. The stage is sixty feet deep and eighty feet long, thus affording plenty of room for the beautiful dancing. This is one of the best and most respectable places of amusement, patronised by the Queen and the nobility, many of whom have boxes hired for the season, entirely for their own use, and for which they pay a large sum of money. The Queen's box is easily distinguished from the others by the richness of its fittings. It is on the first tier, and the first from the stage on the left

hand side. We were highly delighted with it, and the number of people that were congregated. It is indeed always fully crowded when her Majesty honours it with her presence, which she very frequently does. On the evening that we were there, part of the performance was "William Tell," who had struggled in former times for the liberty of Switzerland, and who, being an expert marksman, had to shoot with an arrow by a tyrant's command, an apple from the head of his son, which he did. The Queen was present, and from our situation we had an excellent opportunity of the honour of seeing her. She was elegantly but simply dressed in white, and looked as happy as a queen could look surrounded by wealth, beauty, and by people who dearly loved her. Upon the stage we saw a great many females dressed exactly alike, all very handsome, dancing and performing difficult evolutions, standing upon one leg, and whirling rapidly round, with the other stretched straight out. It was the last evening upon which Taglioni, the favorite French dancer, was to dance in England, and an English friend who accompanied us very frequently asked us how we liked her dancing. He, for his part, was very much delighted with it, but to us it appeared of very little interest; and we were very much surprised to hear that for every night that she had appeared upon the stage she had been paid one hundred and fifty guineas!!!

Only think,—one hundred and fifty guineas every night to be paid in England to a woman to stand for a long time like a goose upon one leg, then to throw one leg straight out, twirl round three or four times with the leg thus extended, to curtsy so low as to nearly seat herself upon the ground, to spring occasionally from one side of the stage to another; all of which jumping about did not, on her part, occupy an hour; and to get more money for *that* hour every evening, than six weavers in Spitalfields (who produce beautiful silk for dresses) could earn all of them, working fourteen hours every day, in twelve months! It does appear so absurd that a dancing woman should thus take out of English pockets every night, for an hour's jumping, more than would keep six weavers of silk, their wives and families, for a whole year. Had we not seen instances that convinced us the English were clever people, we should have thought them very foolish indeed thus to pay a dancing puppet.

This, together with the elegant and fashionable dresses of the ladies in the boxes, of a variety of colours; the chaste and appropriate decoration of the interior of the house; the brilliancy of the gas lights, and the multitude of wax candles; the soft and melodious harmony of the music; afforded us the most magnificent and grand spectacle we had ever beheld. Improper persons are not allowed to enter this place, and we saw one man

expelled without any ceremony, on account of some improper liberties he had taken. There is also a large and handsomely fitted-up refreshment room attached to this house, where refreshments, such as pastry, fruit, and the favorite beverages of the seasons, are to be procured. The visitors, at least many of them, resort to this place in the intervals of the different acts. The expenses of this establishment must be enormous, as they pay the singers many thousands a year, at least the principal ones, and some of the best dancers are paid very largely; and there are such beautiful performers on the musical instruments, that they and the swarm of dancers must cost much money. The boxes are, most of them, subscribed for the season; but boxes and stalls may be engaged by going to booksellers' at the west end of London, at fourteen shillings and sixpence, pit tickets are eight shillings and sixpence each, and the admission to the gallery is five shillings.

DRURY LANE THEATRE.—This is a very large place, with a noble external appearance; it is 131 feet by 237 feet. There are boxes, pit, and two galleries; admission one shilling and two shillings to the different galleries, three shillings and sixpence to the pit, and five shillings to the boxes. There is a box for the queen, and several private boxes; the lower tier of boxes is called the dress circle, where none are admitted except the well dressed. It was full, but of quite a different

class of persons from the Opera House. The persons in the gallery made much noise, whistling and yelling. There is a beautiful chandelier, lighted with gas, hung from the centre of the roof, or dome. We saw here Van Amburgh with his lions; it was most wonderful to see the state of subjection he had these fierce beasts in. We were much surprised to see the boldness with which he entered their den, putting his head between their teeth, and treating them as if they were quiet dogs. Although a wonderful performance, it was not pleasing; for we thought if their savage nature should return to them the man must die, and then people would reproach themselves for going to encourage him in putting his life in danger.

We again visited Drury Lane Theatre, and found it much altered: a boarded floor had been laid over the pit level with the stage, and there were many hundred persons walking about to hear a beautiful concert of instruments; some of the finest music and best performers were to be heard here for only one shilling each.

COVENT GARDEN THEATRE — We went to see Covent Garden Theatre, the prices of admission were the same as at Drury Lane; the theatre appears to us much in the same style as Drury Lane, but smaller. We saw performed the Critic: we saw Madame Vestris (or Mrs. Charles Mathews), who is the manager of this place; we

should not have taken her for more than twenty-six years of age, and we are told she is near fifty; we forget the name of the second piece in which she performed, but we were much amused. The English, when they are pleased with anything in a theatre, clap their hands and stamp their feet; and if they wish a dance or a song repeated, they do both clap and stamp and whistle; and thus they keep on until the person comes back and does over again what they require. Attached to the great theatres is the saloon, where refreshments of all kinds are to be procured, but virtuous females could not be seen here; for here, at the half price, are to be found swarms of well-dressed, highly-painted, but unhappy females, who, having lost their virtue, resort, as a means of maintenance, to the saloons of theatres, and with much wantonness endeavour to draw young men into the snares of vice and misery of which they themselves have been the victims. We do think this very discreditable to be allowed; and we also think that much of the dissipation, and many of the robberies committed by young men, may be traced to an intimacy with improper females, which commenced within the saloon of a theatre. The saloons of those theatres that are allowed to be infested with such characters, are, instead of being an accommodation to the public, harbours of vice, at which a virtuous man would frown with disgust.

ASTLEY'S AMPHITHEATRE.—This theatre is situated a little beyond Westminster Bridge, on the Surrey side of the Thames. Here is to be seen some capital horsemanship. We saw a man ride and manage four horses at the same time; and a little girl danced upon the horse's back whilst it was galloping; she also danced upon the tight rope. Some men took most extraordinary leaps over a great many people's heads, and ponies jumped through hoops, and did many feats quite like dogs; we felt much pleased with these things. The horses are admirably trained, they rise up and lie down at the word of command; they lie as if dead at the bidding of the rider; and when the tune is played they dance with their feet as if they were human beings. At this place a man of the name of Carter exhibits his collection of wild beasts, consisting of a noble Bengal tiger, a large African lion and lioness, and about five or six other small tigers; and he has so completely tamed these wild animals, that a description of it would be almost incredible to those who have not seen them personally.

We saw one of the tigers seize him by the neck, while he feigned to be asleep in a forest, and drag him down a flight of stairs as if really to devour him; the scenery so well resembled a wild jungle that a stranger will take it for reality, and think the man to be really a victim to the fury and rapacity of the beast: he, however,

after a short struggle, completely overpowers the animal.

He next drove the African lion in a car on the stage, and it was curious to see the animal harnessed and dragging the car with the driver, who whipped him as if he was a waggon horse; he then entered the den in which all the animals were kept together, and began boldly to thrash them and make them obey his commands. He made a bed of one, a pillow of another, and bolster of a third, to take, as it were, his nightly rest, while a fourth animal played all manner of tricks with him; and there he was, composed and fearless, as if he had been bred and born amongst the ferocious and greedy children of a wild and dreary forest. The terms of admission are—Boxes, four shillings; Pit, two shillings; Gallery, one shilling.

VICTORIA THEATRE.—This is a beautiful little theatre, situated on the Southwark side of Waterloo Bridge. We saw here "Paul the Rover," in which we saw Mademoiselle Goodesham dance; she is the Taglioni of this place; she is a pretty little woman, and a very nice dancer. But here we saw the "Incredibles," in which Monsieur Laroche and Monsieur Noel, two Frenchmen, performed some extraordinary feats of strength. They were bound to a whirling pole, and, suspended by one leg, lifted several persons. A bridge with sixteen persons was lifted, and a car,

with an immense number of people in it, was lifted. Suspended by their feet, they drew up several persons to the ceiling of the stage, and exhibited various proofs of their great strength and muscular power ; they were both fine made and powerful men. In another very amusing piece, called the "Dumb Savoyard," a Mr. Blanchard performed a monkey, and it was almost impossible to distinguish him from a real monkey. He ran rapidly on his hands and feet about the stage, played all manner of tricks, ran up the side of the house to the ceiling, and all round the gallery, descending on the other side. Every body was in constant laughter at his freaks. We were much pleased with our evening's entertainment.

The English are decidedly a wonderful people, and money in England can do every thing ; it makes Horses dance, Lions work as Horses, and men assume the appearance of Monkeys.

Besides these there are a great many other Theatres in London, where we have not been to, such as the Haymarket Theatre, the Surry Theatre, the Adelphi in the Strand, the Prince's Theatre in King Street St. James's, and others, the whole of them are about twenty in London, but as they are minor ones to what we had seen we did not deem it prudent to waste our time by visiting all of them.

In concluding our description of the Theatres of London, we have to recommend to our country-

men, should any of them on their visit to England desire to see the Theatres in London, always to go to the boxes, which are frequented by a respectable class of people, and there they will receive much civility and attention, but never for the sake of economy go either to the pit or gallery of any of them, (except the Italian Opera) because these places are always resorted to by the humbler classes, as well as by rogues, thieves, and pick-pockets, and should a stranger happen to be there, he is often teased and insulted with gross and abusive language by these fellows, besides he could not see much of the performances ; we state this from the treatment we once experienced at Astley's Amphitheatre, but on our discovering the error, we immediately left the place. We therefore advise our readers, always to pay a little more and go to the boxes, rather than be in company with a set of fellows, who derive pleasure at the expense of your comfort.

And here we would inform our countrymen that the majority of the lower orders in England are very rude in their manners and behaviour towards strangers, whom they do not like to see in their own country.

CHAPTER XI.

SCIENTIFIC INSTITUTIONS.

THE GALLERY OF PRACTICAL SCIENCE is situated in the Lowther Arcade, near Charing Cross, in the Strand, which is kept for the exhibition of models of all kinds of machinery; there is to be seen the Steam-Gun of Perkins, which showers forth bullets, more than one hundred and sixty every minute, and we could not help thinking, if universally adopted, the Steam-Gun would go far towards putting an end to war. For when the inventions of man have so far improved the numerous instruments of destruction; so that men marching to a breach in a fortress, go to *certain* death, no word of command will urge them forward. And the strong man will then no longer be able to tyrannize over the weak. For provided any fortress is but provided with a few steam-guns, throwing out bullets made of IRON instead of lead, column after column would be mown down. Ships, which at present attack forts, almost with a certainty of success, would by a well

pointed steam-gun, have their decks swept of their men and they themselves would be perforated through and through and be sunk. We can also conceive there would be no difficulty if the balls were of iron in firing them red hot. And then the trifling expence of the machine required for the steam-gun, places it within reach of every body's pocket. We saw here very beautiful models of locomotives, and of engines, and machines of all descriptions. And we also saw the Daguerreotype which is the most extraordinary production of modern times. We know not how better to describe it than to say, that it is embodying a shadow, or, in other words, that it permanently fixes upon a plate previously prepared for the purpose, the reflection of houses, trees, &c., and the picture is more perfect than any painter can make it. The French government purchased the discovery of Monsieur Daguerre, and very kindly made it known to the public. In a room fitted up as a Theatre, with-shutters by which the light can be totally excluded, M. Dele Croix, a French gentleman, explains all the process. Five distinct processes are required to perfect a drawing by means of the Daguerreotype. The plate which is of thin copper silvered over, must be *carefully polished*, an operation requiring much care and nicety of hand, very fine pumice stone is applied in the first instance with cotton and oil. It is then applied with dried cotton, after which, a small quantity of

diluted nitric acid is carefully dropped on the plate, and accurately distributed over the surface, another light polishing succeeds, after which, the plate is heated over a spirit lamp, which must be moved beneath by the hand so as to distribute the heat equally; or, which is preferable over charcoal, until its surface is evenly covered with a white appearance like a veil spread over it, when it must be suddenly cooled by laying it on a cold stone or a marble table; after this process, the operation of the acid is repeated three times, but the plates are generally put by after it has been twice applied, that the operation may not be too long delayed; the third and last application must be made immediately before the plate is used. This polishing is the only part of the operation that can be said to be seen: for in all the others, except placing the plate in the Camera, which in the Adelaide Gallery was done out of the room, the day light must be excluded, and the light of a small taper is alone allowable. As soon as the plate is polished, the shutters are closed and the operator places the plate in a close box to undergo the second process—*The application of a sensitive coating*. This is done by fixing the plate face downwards in a box contrived for the purpose, in the bottom of which stands a cup with Iodine, broken into small pieces and covered with gauze. The fumes of the Iodine rise, and being evenly distributed by the gauze, spread themselves over

the plate, which, within half an hour is covered with a fine coating of a yellow gold colour. The moment it has acquired a sufficient coating of the Iodine, it is removed to a box, and being closed up, the third process is, *preparing the Camera Obscura and placing the plate in it.* In order to judge of the effect of the object to be represented, the focus is regulated through a powerful lens, on a plate of ground glass occupying the position in which the prepared plate is to be placed. When every thing is properly adjusted, the box containing the plate is introduced and exposed to the focus of the Camera. The time necessary to complete an impression varies according to the power of the sun's rays, sometimes in about twenty-five minutes a representation is formed on the plate, or speaking otherwise, the shadow is then embodied.

The fourth operation is *bringing out the image.* To do this, the board with the plate is removed from the box and adjusted face downwards, at an angle of forty-five, in an iron box contrived for the purpose, in the bottom of which is a cup of mercury which is heated by a spirit lamp placed beneath; after it has remained here some time, it is replaced in the case with folding doors until the fifth and last process (removing the sensitive coating) is performed. This operation is to remove a portion of the Iodine when a solution of common salt is made use of. The plate is first dipped in common

water, and is then plunged into the salt and water and carefully moved round with a copper hoop ; when the yellow colour has departed, the plate is placed on a desk at an angle of forty-five, and distilled water warm, but not boiling, is carefully poured over the surface. As soon as the moisture has evaporated, the operation is completed, and the drawing may be safely exposed to the full light of day. The appearance of these drawings is very peculiar. The shadows are a dull grey, varying until they become almost black, and though the pictures they delineate are accurate in the extreme, they are not pleasing. They appear unnatural and look somewhat like a moonlight scene. The Daguerreotype, with all its necessary apparatus, is manufactured and sold in Paris, for about £20. In Bombay, where the sun is always powerful, pictures of scenery could daily be produced. And one great advantage is, that for copying, their fidelity to nature will strongly recommend them. We cannot take leave of the Adelaide Gallery without expressing our admiration of the usefulness of such an institution. There is a powerful microscope and lectures upon several subjects are delivered, and for *all this*, the admission is only one shilling.

POLYTECHNIC INSTITUTION.—We often went to see this Institution, 309, Regent Street, it was established in 1838, upon the same principle as the Gallery of Practical Science, in the

Lowther Arcade, but having had the advantage of seeing the working of that institution, it started with peculiar advantages over its predecessor, and we are quite sure that there is not in any country to be procured so much intellectual amusement for a shilling, as is to be had at the Polytechnic Institution; for you can be constantly amused and your mind improved, from half-past ten in the morning until half-past four, and only pay one shilling, or you can go from seven until nearly eleven at night, for a similar sum. A band of music plays daily from three to five o'clock, and in the evening from about eight until the exhibition closes. There are thirty different rooms connected with the institution. The whole building is three hundred and twenty feet in length.

The first apartment you enter, is a hall forty-five feet long and forty feet wide, devoted to machinery and manufactures. All the machines in this hall are worked by steam power. There is a lathe for turning ivory, hard woods, brass, &c., with all the apparatus, for the most beautiful of ornamental turning. A loom for weaving ribbons, a loom for weaving checks, a braiding machine, a twisting machine, a warping mill, and a beautiful four horse power steam engine. On the opposite side is a gem engraver at work, a copper plate printing press at work, steel and copper plates engraving, also a manufactory for optical instruments,

and for grinding and preparing lenses for telescopes and glasses for spectacles, &c.

You then proceed to the great hall, one hundred and twenty-feet long, forty feet wide, and forty feet high ; in the centre are two canals with a surface of seven hundred feet of water, attached to which are all the appurtenances of a dock yard, constructed by the government engineers, the models deposited by permission of the lords of the admiralty, with a great many locks to keep up a head of water upon canals, and a series of water wheels in motion, to illustrate lectures on naval architecture and hydrostatics. At the end of the canal is a deep reservoir of water into which a diving bell capable of containing four or five persons is lowered to a considerable depth under water, air being supplied by two powerful air pumps, so that visitors may descend with convenience, and whilst we were there we saw several persons go down, among whom were some ladies, the only inconvenience experienced whilst under the water is a great pressure upon the inside of the ears, which to stout persons of a full habit of body becomes very painfully troublesome. We know several persons who have descended and they have felt no ill effects from it. A diver, clothed in a patent water and air tight diving dress, goes down a ladder to the bottom of the reservoir of water, being supplied from the air pump with air through a tube that enters into his

dress ; he is when prepared to descend, the oddest looking creature ever seen, he has an immense helmet of white metal over his head, and in front of his eyes are two large thick pieces of glass protected by bars of metal, this helmet is strongly strapped to his water proof dress, and he then presents a most laughable appearance ; he is obliged to load himself with heavy weights before he gets into the water, otherwise his buoyancy would cause him to float on the surface, but thus loaded down he goes, and will pick up money or any small thing thrown down to him, walking about the bottom of the clear water as unconcerned as possible ; a model of a ship containing a small charge of gunpowder is sunk some depth under the water, to which the diver attaches wires, communicating at a considerable distance with a Voltaic battery which when connected instantly explodes the powder and the vessel is shattered to pieces, thus illustrating Colonel Pasley's clever method of destroying the wreck of the Royal George at Spithead.

An illustration of the patented plan for preventing ships from sinking and for raising them when sunk without injury is also exhibited. The diving bell is made of cast iron, open at the bottom with seats all around, and is of the weight of three tons ; the interior for the divers is lighted by openings in the crown of thick plate glass, which are firmly secured by brass frames screwed to the

bell : it is suspended by a massive chain to a large swing crane, with a powerful crab, the windlass of which grooved spirally and the chain passes four times over it into the well beneath, to which chain is suspended the compensation weights, and it is so accurately arranged, that the weight of the bell is at all depths counterpoised by the weight acting upon the spiral shaft; the bell is put into action several times a day, and visitors may safely descend a considerable depth into the tank, which with canals, holds nearly a thousand gallons of water, the whole of which if required, can be emptied in less than one minute. The diver's dress, helmet, air-tubes, &c., are patented articles, having been introduced by Mr. Deane. With the diving bell and the diver's dress, every thing almost can now be performed under water; the tops of piles can be sawn off, an eye bolt can be driven into a sunken vessel to make purchases fast to, in order that she may be hove up. Rocks can be blasted by the introduction into them, at any depth under water, of charges of powder, which can be exploded through water proof tubes, or by a galvanic battery by wires.

A gallery runs all round this hall, which is thickly studded with models and curiosities of all kinds. At each end of the gallery is placed large metallic circular reflectors, about twelve feet in diameter; they must be quite one hundred feet apart from each other,—and yet, although there is

a constant noise from the operations of the several working models, and of the number of persons who are talking, a person whispering to one, is distinctly heard by his friend at the opposite side in front of the other shield.

The effect in looking down from this gallery upon the several things in constant motion, is quite enchanting, and we do not hesitate to say, that if we had seen nothing else in England besides the Adelaide Gallery and the Polytechnic Institution, we should have thought ourselves amply repaid for our voyage from India to England.

There can be nothing conceived more interesting to persons like ourselves, who having from an early age been taught to believe that next to our duty of thankfulness and praise to our God and Creator, that it is the duty of every man to do all that he can to make all mankind happy; we were early instructed that the man who devoted his energies to the works of science and of art deserved well of his fellow men. To us then brought up in India for scientific pursuits, and longing ardently to acquire practical information, connected with modern improvements, more particularly with naval architecture, steam engines, steam boats, and steam navigation, these two Galleries of practical science seemed to us to embrace all that we had come over to England to make ourselves acquainted with, and it was with gratitude to the original projectors of these insti-

tutions that we gazed upon the soul exciting scene before us, we thought of the enchantments as related in the Arabian nights entertainments, and they faded away into nothingness compared with what we then saw. Here within this limited space were miniature steam ships, with every possible variety of improved machinery, gliding upon the water ; here were exhibited all and every description of paddle wheels for propelling them through the water. There was a ship upon the stays ready to be launched upon the removal of the dog shores ; here was every possible variety of lock gates for entrances to wet docks, calculated to open with facility and to resist the pressure of a great weight of water when the ship was in dock ; here you could learn how safely to descend into the sea with different contrivances and here you were taught how you might best ascend into the air in a Balloon. Here the scientific man for hours and days may acquire valuable information and here the man in quest of pleasure and amusement may day after day gaze upon pleasing inventions and beautiful models of a light nature to please the eye whilst his ear would be charmed with good music.

It is not our intention to describe all we saw at the Polytechnic, or to follow any particular rule or order with them, but we must point out a few of those things which most delighted us. We should speak first of models ; steam boats, life boats, &c.

invented by Captain George Smith, R. N. a temporary rudder fitted with chain rings, a lower mast fitted with iron fishes to preserve it if wounded or injured, paddle wheels fitted with grooved and cogged wheels for the application of manual labour at the capstan and winches in case of accident to the steam engine or to be used before the steam can be got up, an alarum to be used on board steam vessels in a fog, the gong or bell to be constantly kept striking by the machinery, a life boat formed of the upper section of the paddle box of steam vessels, the ends are made with two air tight cases or tanks, and the model is intended to shew the practicability of every steam vessel carrying two large boats for the purpose of saving the lives of the passengers and crew in the event of the vessel being burnt, wrecked, or sunk by coming in collision with other vessels. The model is fitted to shew an easy method of getting the boats into the water when required, this plan has been adopted and fitted to Her Majesty's steam vessels Carron and Firefly and to the Pacific company's vessels, Chili and Peru, and ordered for those of the Royal Mail company and of the Niger expedition; there are also plans of his for propelling steam vessels by propellers in the shape of feathered wheels astern the vessels, instead of having paddle wheels at the side; all these things look very pretty in models, and many persons think if they perform correctly

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upon these small scales they must answer, but the fact is otherwise. It is from its great weight absolutely necessary to have the boiler and steam engine near the centre of all vessels and the great awkwardness about having wheels astern is that a very large shaft is required to pass from the engine to the stern in order to have the power of giving motion to the wheels, which is very inconvenient, inasmuch as it interferes with the internal arrangements of the vessel, and there is always danger of the shaft becoming out of order; it also gives a great tremor to the stern of the ship, and is very likely to strain that part. We know it is very desirable to keep the wheels out of the way of shot in action but we think much consideration is required before it is decided to abandon the present paddle wheels, as they can and do propel ships through the water under all the action of rough sea, contrary winds and powerful tides. Look at the extraordinary quick passages made by the Great Western and the British Queen and more recently by Mr. Cunard's Halifax Mail packets. We hope these new fangled things will be well tried before our good old well-working paddle wheels are laid by.

The safety boats over the paddle wheels is a most important improvement, and every steam vessel should be obliged to have them, as they are no inconvenience and are beautifully arranged for quickly being lowered for use.

There is a Lecture Room capable of containing five hundred persons and in the course of the day the following different lectures are delivered; Electro-Magnetic and Electrical demonstration, Coining Press and Electro-Magnetic Motive Machine, Aerostation, in which balloons are inflated and liberated. Chemical Lecture, Electrical Lecture, and Microscope, also on the Electrotpe, method of protecting ships from Lightning and several other branches of Natural Philosophy, and all this recollect for one shilling only.

The Electrotpe is the most extraordinary discovery of modern days. A copper plate engraving of a finished picture, that has taken an artist months to complete, can here by chemical solutions and an electric shock produce a duplicate plate so exact that the print taken from the one or the other cannot be distinguished. A wax impression of a seal can in a few hours be so admirably taken in copper by the Electrotpe that impressions exactly resembling the wax impression may be produced without any person telling the copy from the original. Every stamp or any raised figure may be copied exactly. It is an important discovery, but it is a very dangerous one. All stamps to deeds can be produced exactly like the Government ones, the raised embossed Queen's head intended as the Government postage stamp, we have heard, is about to be withdrawn, from the ease with which any body can

make a die to produce them. And dies for making counterfeit money can be produced without any trouble. These are the evils, on the other hand the cheapness with which endless facsimiles may be made of wood and other engravings will materially lessen the price at which books with good pictures can be sold, and there is no saying where this thing is to end; dies for embossing plate can be multiplied, and every thing that has a raised surface can be copied exactly.

We saw in the lecture room numerous living animalculæ in water, exhibited through Cary's Oxyhydrogen Microscope, upon a screen containing four hundred and twenty-five square feet, and to see the hundreds of monsters of *horrid* shapes in a *drop of water* magnified so as to appear several feet long, and to see a flea made to look as large almost as an Elephant, and the myriads of live eels in a bit of sour paste no bigger than a pin's head filled us with wonder and awe of that Being, who has created the most minute living thing with all the air vessels and all the functions of life similar to the larger objects of his creation; and when we remembered to have heard it said, that there were men who say there is no God, we could only wish that such men, *if any such there be*, could be brought here to see these things, and then surely if they were not devoid of all reason they would say these things cannot be the effect of chance; there must have

been, and now is a great, a good God who created all things for some wise and good purpose, and if we cannot penetrate all his designs, if there are some things for which we cannot account, let us bow with awe before our Creator, and acknowledge that all his productions are good, and let all human beings upon the face of the earth praise the Lord their God.

There is a very complete laboratory under the Hall, where Mr. Maughan, Chemist of the Institution, has a chemical glass, and where ores, minerals, earths, &c. are tested and their component parts made known.

In a room under ground there was a beautiful picture of Canton by a Chinese Artist, twenty-five feet long, magnified very much by powerful glasses. And through them we looked upon two paintings on glass from pictures by the celebrated Mr. Martin, "Joshua commanding the sun to stand still," and "the destruction of Nineveh," and they were most beautiful. Opposite to these several drawings taken by the Daguerreotype were exhibited through powerful magnifying glasses, and we have to express our thanks to the gentleman who exhibited them, and who we understood to say that he had taken several of the views himself, for his kindness in changing the pictures several times whilst we were there, in order that we as inhabitants of another land might see as much as possible. We saw a view near Windsor, some

views taken from the front of the Institution and several views of places in and near Paris. We should not forget to mention that the temperature of the whole building is kept uniform and of a pleasing warmth by Bramah's hot water apparatus.

We looked into an apartment where there was a remarkable model of a portion of the Isle of Wight, modelled according to a scale, by Captain Boscawen Ibbotson, and where every elevation or declivity, every hill, every thing upon it for nine miles is shewn with mathematical precision ; we were told it was the work of many years, and we should think that an individual, who was capable of producing so finished, so laborious a piece of art as this, could have been much more beneficially employed, for after all it is good for nothing, you peep through the glasses and see that it is there, and regret that so much valuable time should have been consumed in so valueless a production.

We were much pleased to see a great many models of machines for cultivating the earth, agricultural instruments upon improved plans ; of ploughs, harrows, rakes, threshing machines and bone crushers, and drills for sowing seeds instead of throwing them with the hand : a beautiful model of a shop front in Regent Street very much pleased us. We were also pleased with the twenty-three articles illustrating the English manufacture of glass at Mr. Apsley Pellatt's Glass

Works, Bankside, London. Here were articles of all sorts of colours, beautifully cut; in particular the Queen's portrait, and a decanter with equestrian figures from the Elgin Marbles in the British Museum: there were also beautiful specimens of the manufacture of English China-ware, being part of services executed for the royal castle at Windsor. We also saw a beautiful specimen of ivory turning, being a bust of the Queen, and several small busts of the Queen, Prince Albert, and Duke of Wellington, in marble, and a beautiful specimen of cloth manufactured from glass. We here saw a pneumatic telegraph (Crosley's) which, by means of air in a tube, will convey signals many miles; and Dr. Arnott's hydrostatic bed, upon which sick persons can move readily, and are not liable, if confined a length of time by illness, to become sore from lying in bed. We saw also a specimen of cloth four thousand years old, taken from a mummy; a very ingenious weighing machine (of Marriott's): you sit down in a chair, and a hand, like that of a clock, points out your weight. We observed a very curious Egyptian astronomical clock, made by Mr. T. Richards of Droitwich, and it is an illustration of the Egyptian system of astronomy; representing the eastern hemisphere of the earth as a fixed body, the tides in progressive motion round the earth, the moon, surrounded by stars, performing her diurnal motion round the earth, to

a second of time; exhibiting her phases, indicating her age, her position in the heavens, her proximity to the sun, her time of rising, setting, &c. The sun, as a body, is represented making his apparent diurnal revolution; his situation in the heavens, together with the minute he rises and sets each day; the relative duration of day and night; the sun's meridian altitude; the ebbing and flowing of the tide in the Thames is seen in a view of London, and the time of high water is pointed out; the day and the name of the month are exhibited throughout the year, with the number of days in each month. This clock has been in action two years, and fully realizes the expectations of the inventor; the mechanism and combinations being quite free from perplexity, its motions are not liable to derangement, and it requires no other attention than a common time-piece.

There are two most amusing machines, called *Phantasmascopes*, one on each side the gallery on the brass rails. A large circular plate, called a disc, is perpetually revolving; and when you look through the apertures in the one, the optical deception is so arranged that, from the quick revolution of the disc, all the figures appear to be rapidly playing on the fiddle, and in the other "playing at leap frog," that is jumping over each other's backs.

There is a very ingenious model of an appa-

ratus to rescue persons from the upper windows of a house, the lower part of which may be in flames ; it is called a Fire-escape ; it consists of a yard similar to that of a ship, made by quickly fitting together several pieces of wood, and a basket at one end ; this is attached to the fire engine, by a windlass and very easy machinery it may be by two people thrust towards a window, to receive and rescue the persons within from the flames, and lower them safely to the ground.

There was a glass case containing a series of objects illustrating the manufacture of Caoutchouc, or India Rubber, with specimens of the raw vegetable gum, in various forms, as it is imported, and likewise numerous articles manufactured from it, from the ropes for the breechings of a ship's gun, to the silk-like fabric of a lady's dress. It is astonishing how extensively India Rubber is used in England ; the climate is so variable that it is at all times, if you go far from home, advisable to be prepared for rain ; it was therefore always considered right to possess an article of clothing that would resist wet. Mr. Mackintosh discovered a mode of dissolving India Rubber in a cheap spirit, called Naptha, obtained extensively from the manufactories where coal gas is made ; and he applied this dissolved India Rubber to bringing together two pieces of cloth, and, passing them through heavy rollers, produced a good-looking material, from which he made most ex-

tensively cloaks, coats, trousers, and divers other articles, perfectly water-proof. These articles, although now manufactured by several persons, still all go by the name of Mackintoshes. A Mr. Cording, three or four doors to the westward of Temple Bar, has manufactured a light cloak of water-proof muslin, very durable, and so portable that you can with ease put it into a large pocket, whilst it keeps out the heaviest rain quite as well as the heaviest garment would. Tubes for various purposes are manufactured from India Rubber, and we have heard it can be used with iron wire so as to form a rope almost indestructible, and yet that it can be tied and spliced quite as readily as if it were made of hemp. There are elastic soles to boots and shoes, deposited in the Polytechnic, by Davie of Charing Cross, in which India Rubber largely enters. India Rubber is now used very extensively, instead of glass, for stoppers of decanters, and they are found highly serviceable, as they totally exclude the air.

Here is to be seen Bramah's and Dickson's Rotatory Engine; it consists of a cylinder having an inner cylinder whose axis is eccentric to the outer one, and which is furnished with four blades, or pistons, working freely through it; the steam acts on the outer edges of the blades and drives them round, thus producing a rotatory motion. Here we also saw an ingenious

model of the Thames Tunnel. Here is also to be seen a mast-rigging model, with specimens of cordage made of wire. We are told that the Blackwall Railway has a rope more than ten miles in length, made of wire, and that it has been in daily severe use for some weeks, and that it is highly spoken of for pliability and durability. Should the manufacture of this description of rope be found to answer, it will be a very grand thing for England.

Iron is found most abundantly in England, and of course in its manufacture gives employment to an immense number of persons, who all consume articles that bring in wealth to the Revenue, such as Beer, Tea, Sugar and Coffee, and wear clothes made from cotton which pays a duty, whilst hemp is brought from Russia and is paid for in English money and the Russians do not take in return any of the manufactured articles of English make, so that if iron wire can produce ropes *even as good only* as hemp, all that money will spread itself usefully over England from the hand working man through the shop-keepers and do much good. It is most extraordinary to see the multiplicity of purposes to which iron is now applied, steam boats, and indeed steam ships, are built now of iron; Mr. Waghorn has carriages on the desert on the overland route to India composed entirely of iron, lighter than they could be made of any other material and possessing this advan-

tage that hot weather will not cause them to shrink. Iron cables we have all seen and the strong prejudice that existed against them, of their want of elasticity, is dying away, for singular as it may appear, iron cables have in use, really more elasticity than hempen ones ; for a ship always rides with her hempen cable in a state of tension (that is drawn out in a line from the anchor to the ship's bow), but on the contrary from its weight the iron cable always hangs slack, (bellying as sailors term it,) and the fact is when the ship heaves the giving up of this bellying of the cable yields greater relief than the elasticity of a hempen cable can possibly do. We have chain used for standing rigging and for securing the bowsprit, we see it used most extensively for knees of ships, we use it in ships for hawse holes, and for facings to bit heads, it has been used for boats, it is used by thousands of tons for Rail-roads. Within doors in England every domestic article may be met with in cast iron, it is used for stair-cases, for mantle-pieces and for cooking kettles, and in the church yard it is used for monuments instead of tomb-stones, on the high road it is extensively used to supersede mile stones, and we hear that it is used even for coffins.

How much does England owe to her inexhaustible mines of coal and of iron ; it is to them she is indebted for all her riches, gold and silver mines are not to be compared to those of coal and of

iron ; gold and silver would employ but few persons and enrich but very few, but coals and iron in their processes afford employment to countless thousands, they are the parents of the steam engine,—no country, destitute of coal and iron, can compete with England in steam machinery, it would be an endless subject to treat upon. Coals and iron are the parents of the power loom, of the spinning jenny, of all the machinery in England. Oh ! happy England, possessing within yourself this source of employment, of manufacture, and of wealth, old happy England you are, and long will be, the wonder and envy of the world, you possess materials that enable you to work machinery, that allows you to bring cotton from India, thousands of miles, to manufacture it into fine muslin, and to send it back to India and to sell it there *much cheaper* than it can be made there, although a few pence per day will there keep those employed in manufactures ;—it enables Englishmen in every market upon the Continent of Europe to offer cloths, cottons, stockings and silks at prices so much lower than they can be produced *even in those places where labour is cheap*, that in many parts they *prohibit English goods* in order that their manufactories may not be closed, from inability to produce such goods so cheap. What does not coal and iron do ? What is there in England that cannot be done by steam ? Carriages fly upon iron rail roads heated by coal,

wood is sawn by steam, iron is hammered into anchors, and rolled into plates, bars, and wire by steam.

The very fires to get up all these powerful machines are blown up by steam, water is pumped by steam, butter is churned by steam, books are printed by steam, money is coined by steam, ships, heedless of wind and tide, navigate the seas by steam, guns are fired by steam, flour is ground by steam, and every article of clothing from head to foot is made by steam.

A very great improvement has taken place in the manufacture of steel from British iron by Messrs. Hollis, Solly and Son of Birmingham, specimens of which are deposited in the Polytechnic Institution. In this institution also is a complete mummy of a female, supposed to have been the wife of a priest in the reign of one of the Pharaohs, three thousand six hundred years since. Were we inclined to find fault with anything in this institution, we should say that the models of the ships are not sufficiently good in comparison with the other things. We think if it is necessary to exhibit any of them here they should be good and highly finished. Here is a model of a carriage to be put into motion by electro-magnetism, and also Taylor's electro-magnetic motive machine, and it is seriously thought either by this method or by forming a vacuum by an air pump, vessels and

machinery may be set in motion without using steam. This however by most persons is laughed at, but when we know how persons were ridiculed when steam boats were first talked of, we will not venture to say but that some propelling power may be found that may answer the same purpose; certain it is that Brown's vacuum machine has propelled a small boat, but then as we have said before, working models are one thing and working in reality is another. There is an ingenious plan of "battens" for a compressor for checking and stopping chain cables when running out of a ship.

There is a most ingenious method of raising water called "Hall's patent hydraulic belt or water elevator;" this entirely novel and important invention is one of the cheapest, simplest, and most powerful hydraulic machines ever known; it consists of an endless woollen band or belt, passing over two plain rollers, one fixed at the top of the shaft, and another below the surface of the water, by moving the upper roller in such a way as to give the belt a *velocity of one thousand feet per minute*, the adhesion of the water overcomes its gravity and a larger quantity than in the case of a common pump is raised and discharged in a uniform and continuous stream at the required elevation. The following testimony in favour of the hydraulic belt is extracted from the Polytechnic Journal for the month of November, 1840,

“ For thousands of years the brains of philoso-
 “ phers have been racked in the pursuit of means
 “ for lifting water, wherein the greatest possible
 “ amount of capacity, simplicity and economy
 “ should be combined ; odd as it may appear, and
 “ it does appear odd, it was reserved for the
 “ present age to accomplish and bring forward an
 “ invention, which far surpasses in these important
 “ requisites any thing of the kind previously
 “ known, an invention which has withstood the
 “ test of experiment under every form and circum-
 “ stance of disadvantage to which new things
 “ brought for the first time into practical use,
 “ without the aid of lengthened or indeed of any
 “ experience, are necessarily exposed, the power
 “ which this water elevator possesses by nature is
 “ one of the most extraordinary and least easily
 “ explained things about it. A common pump
 “ will lift water thirty feet at an expenditure of one
 “ hundred to produce sixty, that is for every hun-
 “ dred pounds of mechanical force applied to the
 “ piston sixty pounds of water will be raised, and
 “ this is the extent of its capacity under the most
 “ favourable circumstances ; but in the case of a
 “ force or lift pump where water has to be carried
 “ above the height of thirty feet by the force of
 “ compression, this per centage will materially
 “ decrease in proportion to the height to which
 “ the water has to be elevated. This part of the
 “ subject appeared to us to be so all important

“and absorbing, that we made a point of having
 “an experiment tried in our own presence, in
 “order to discover if the statement made by Mr.
 “Hall, that his belt would lift at great depths,
 “eighty-five to ninety pounds of water for every
 “hundred pounds of power employed, was sub-
 “stantially correct. The result of that experi-
 “ment which was made at a well in the Portman
 “market, one hundred and thirty feet deep was,
 “that steam power equal to one hundred and
 “seven thousand eight hundred and ninety-two
 “pounds, lifted ninety-six thousand four hundred
 “and sixty pounds of water, or nearly ninety per
 “cent. Here then, we have the simplest hydraulic
 “machine known, which shall do more work than
 “the most complex can get through, and the cost
 “of which, both in its original construction,
 “and subsequent working shall be a great deal
 “less. Its portability too is another great feature
 “in the way of recommendation.”

We have taken much pains to give the pre-
 ceding report of this most economical and admi-
 rable mode of raising water, thinking that it may
 be very useful in some parts of India. It is as a
large working model fully proved to be what it is
 represented, and we think it right to give this
 publicity to it.

We have given a very long account of the
 visits we paid to the Polytechnic Institution,
 because we saw nothing in London,—nothing in

England, half so good. We should have mentioned that the locks for holding water in canals, shew the method of passing vessels up an inclined plane by the resistance of her own paddles, as is practised by those vessels that go up the American rapids. Here also are good and very correct models of a building slip, and of the launching slip, with the ship's cradle, bilgeways, &c., and also a dry dock with improved gates for opening and shutting by improved machinery ; also of a graving slip, with the means of hauling ships up. There is also on a pier, a model of the masting sheers, by which a very few men could lift with comparative ease the largest ship's masts, and put them in their places. Here is a powerful electric machine, and a powerful voltaic battery by which severe electrical shocks can be given. We could say much more of the many good things that we with so much pleasure saw here, but our time will not permit us. Oh, how much do we wish to see something of this kind commenced at Bombay. It must not be looked upon as a toy or as an idle lounge to kill time ; here every human being, let his taste be what it may, must be pleased, must be improved. And we consider the greatest advantage of such an institution, to be the saving of much valuable time. Many men have spent years of their lives in attempting to discover perpetual motion, and have sacrificed money and labour to make a machine to go for ever, without

stopping, when if they had had access to such a place as this, they would soon have learnt by inspecting good, correct, highly finished working models, that no such thing as perpetual motion can ever exist. And yet, perhaps, some of the most important mechanical improvements that have been made, have been discovered by chance, by individuals who have been perseveringly engaged in pursuit of perpetual motion. And this is not the only idle pursuit that has been beneficial to mankind, some two centuries since, very many of the cleverest of men had an idea that there was a way of making gold, and that certain chemical compounds would produce a substance to be called the philosopher's stone, and that this when found, would enable the possessor to produce gold at will. This idea induced people to go to very great expenses to endeavour to discover a thing that had no existence, but in trying to discover what was not, they made some of the most important and grand discoveries in chemistry. Again, from a very early period of society, there were persons who pretended to judge of the influence of the stars, and to foretell coming events from the motion of them, and of the star's aspects to each other; these people were called astrologers, and if they were told the moment *precisely* that an individual was born, they produced what they called his horoscope, and thus by their science, called astrology, they pretended to decide what his

propensities were to be, and what his future destiny. Ridiculous as this may appear, it was believed by the learned, the great, the good, and the wise. And what was the fact, whilst persons were devoting their whole time to an idle pursuit, they were doing very great good, for whilst they were themselves in the idlest of all idle chaces, they were making rapid strides in improving the most beautiful of all studies, the science of astronomy. And thus we see how the great and good God produces from the follies of mankind, improvements to benefit the whole world. For what can be more beautiful than the idea, that poor man is enabled for three or four years before hand, to calculate to the very moment that such a star will be visible above the horizon, if the telescope is placed in such a direction.

MECHANICS' INSTITUTION.—We should not forget to mention, that for the improvement of the working classes in almost every large town in the kingdom, there are mechanics' institutions, where a large proportion of the respectable inhabitants unite with the day-labouring and subscribe sums not exceeding ten shillings a year, more usually two shillings per quarter, and hire or build a large room where lectures upon those subjects connected with mechanics, or the principles of nature, are delivered, very frequently, either by clever gentlemen in their neighbourhoods, or by professional lecturers hired from London. Geology,

Electricity, Hydraulics, Hydrostatics, Pneumatics, and the powers of the microscope thus become familiar to them all. Persons in the first instance present books, and as their funds allow, they make purchases, until in a very short time, they get extensive collections of first rate books. We have heard our friend John Fincham, Esq., who is a great encourager of these institutions, lecture to the Chatham Mechanics' Institution, and we are perfectly satisfied that these institutions are calculated to do much good, as working men here become acquainted with correct data, as regards moving powers, the steam engine, &c., and many, very many will be enabled to carry out any little experimental improvements from hints which they may hear at mechanics' institutions. At all events, it will afford to such as wish to become clever men an opportunity to do so, as the books which they can get at these places could not be procured by them unless such institutions were in existence, and many a young working man is kept out of bad company by having the lecture room and the library of a mechanics' institution to resort to, instead of being the visitor of the drinking room of a public house. We heard there was much prejudice against their being established, but the advantages of them have at last become so apparent and obvious, that nearly every one now thinks they are a blessing to the class of people for whom they were intended.

CHAPTER XII.

BAZAARS.—LAYCOCK'S DAIRY.—MARKETS.

THERE are in London several bazaars for the sale of trinkets, cutlery, artificial flowers, &c., there is an extensive one in Soho Square, King Street Bazaar, Portman Square, and the Pantheon in Oxford Street, they are very well conducted, and as we consider the Pantheon in Oxford Street, to be superior to all the rest, we shall endeavour to describe it. You enter first a hall where there is sculpture and a great many vases for sale, and you then go up a wide stair case to a most extensive valuable and beautiful collection of oil painting; here are to be found some very magnificent pictures occupying three spacious rooms, and in a very large gallery, as well as upon the ground floor, are to be purchased at stalls kept by well dressed and most orderly behaved young ladies, almost every fancy article that is to be procured in any of the shops in London. Here is to be found jewellery,

music, china work boxes, tastefully made children's frocks, all sorts of children's toys, and waxen flowers, so natural, you cannot tell them from nature—you are not importuned to purchase—you walk about as long as you please—look at every thing, and if you ask the prices, have a civil answer. Many of the young women who keep these stalls are very handsome. We should think there are nearly two hundred of them. There is here also a magnificent conservatory, where beautiful plants and nosegays of flowers may be purchased, and here flower seeds and flower roots may be obtained, and a person may be quite satisfied from the respectability of the proprietor, that all the things are good of their sorts. There is no charge made for admission.

We spoke of the Adelaide Gallery being in the Lowther Arcade. It is a very beautiful erection. It is two hundred and forty-five feet long. It is twenty feet wide, and is thirty-five feet high. It is a covered paved promenade lighted by skylights in the roof, and the shops on either side, which are all uniform as to size, are well stocked with jewellery, millinery, cutlery, perfumery, toys and fancy articles. It is a very nice place to walk in in the heat of the day, and next to the bazaars, one of the prettiest sights of the sort in London; when it is not much thronged with people, the perspective from one end of the Arcade to the other is very beautiful. There is also an Arcade of a

similar nature in Piccadilly, called Burlington, which perhaps is frequented by more fashionable people for a lounge, but it is in its nature so much like the Lowther Arcade, that a further description would be useless.

LAYCOCK'S DAIRY.—Accompanied by our friend Mr. Baldock, of Chatham, we paid a visit to Thomas Flight, Esq., of Highbury Terrace, who is the proprietor of Laycock's dairy, Islington, near London; and which place we visited, and were shown and explained every part of it. It is certainly one of the curiosities of London, and is a most valuable and extensive property.

There are fourteen acres surrounded by a high wall, and which is nearly covered with buildings for the several purposes required. And first there are upwards of four hundred cows, which are kept for supplying milk, and twice in each day, viz. at three o'clock in the morning, and at noon they are milked by women. The whole of the cows are kept in stalls, and the food is varied as much as possible. Mangel wurzel, a large species of beet root, is their chief food, and then they have turnips, cabbages, carrots and clover, when they do not continue to give a large quantity of milk; oil cake and other things are given to fatten them for sale at Smithfield market. All the cows were fine animals, sleek as race horses, and they are curried with a comb every day. As it is quite necessary to have four hundred cows to milk each

day, they are obliged to keep more than that number on the premises, and there is a hospital for the cows to have their calves in, and where any that are unwell have medical treatment.

The milk is taken into a dairy as soon as milked, which place is kept most scrupulously clean, being scoured with hot water, and every thing in it twice every day. It is supposed, in London, that more than eight million gallons of milk are used in a year. There are immense pits for the reception of grains, which is a great article of food for the cows. Grains are the refuse of malt after beer has been made from it, and we were surprised to learn, that if covered from the air, they would keep good, and fit for the cows to eat for seven years. There must be an immense capital locked up, as each of the cows are worth more than twenty pounds, and the proprietor is obliged to have four farms, to supply all the varied green food that is required. He has a great number of horses constantly fetching grains, and the daily food required, and to cart away the manure. He has also numerous male and female servants about the premises to pay.

Whilst inspecting the dairy, we were forcibly reminded of Bombay, for from a farm of Mr. Flight's, at Enfield, a number of oxen arrived, bringing the turnips for daily consumption, and one of them requiring to have a shoe put on, we went to witness that operation, and here was a

great improvement upon the plan pursued at Bombay. The animal, instead of being thrown down, was placed in a frame in which he stood upright, and in a few seconds, he was secured therein by straps, and he was shod quite as readily as a quiet horse. Attached to the dairy within the walls, are buildings appropriated as layers for cattle, and where when they have been driven some distance to market, they rest for a day or two before they are exposed for sale. A large proportion of the oxen that come by steam from Ireland and Scotland, are placed here for a few days, where they are rested, sheltered, fed, and abundantly supplied with good water. The charge for sheltering and feeding is very moderate, and upon Sundays it is not unusual for upwards of two thousand animals to be within the walls, and upon some occasions, even two thousand five hundred have been here. We were much pleased with our visit to this place, never having seen cows in such numbers, and in such fine order before. When we name Sunday as the day when such numbers of sheep and oxen are to be found reposing here,—it is right we should explain why. It is that they may be ready for Smithfield market, which is held every Monday. It is asserted that the carcasses of different cattle consumed in one year in London, is as follows:—Oxen and cows, 110,000; sheep, 770,000; lambs, 250,000; calves, 50,000 pigs, 250,000, and that their in-

dividual average weight is as follows:—Oxen (each) 800 lbs.; calves, 140 lbs.; sheep, 80 lbs.; lambs, 50 lbs. It may be as well for us to say here, that the cattle in Smithfield are all sold alive. There are daily, large markets for slaughtered animals in Newgate market and at Whitechapel. There is also daily, a large fish market at Billingsgate and Hungerford. At Billingsgate alone it is said, that 120,000 tons of fish are sold within the year, and of the following sorts:—Salmon, 45,446; turbot, 87,558; cod, 441,138; herrings, 3,366,400; maid, plaice, skate, sprats, and soles, 115,215 bushels; haddock, 90,604; mackerel, 482,492; lobsters, 3,076,700; whiting, 1,954,600; eels, 1,500 weight; crabs, 500,000.

The great vegetable market of London, is situated in Covent Garden, and it amply repays any one for paying it a visit. It has forced vegetables and fruit all the year round, and the prices that are paid for these forced things and early flowers exceed belief. All the fruits of England, when in their proper season, may be bought in London, cheaper than on the spot where grown. As from there being a certain sale in London, it is preferred to send it where it is sure to sell in preference to selling it with difficulty and uncertainty in the country.

The annual produce of the garden grounds, cultivated for supplying the London markets with vegetables and fruit, is said to amount to

£1,045,000. There are capital poultry markets in London, of which Leadenhall and Newgate are the best. The quantity of poultry alone without game, annually consumed in London, amounts to **£80,000.** The annual consumption of butter is **11,000 tons,** and of cheese **13,000 tons.**

CHAPTER XIII.

NATIONAL AND CHARITABLE INSTITUTIONS.

GREENWICH HOSPITAL.—We paid a visit to this place, which is about five miles east south-east from London. It has a royal park; and from One Tree Hill, on a clear day, the view of London and the river Thames is most commanding. Here old worn-out sailors, called pensioners, are to be found with very good spying glasses, which they offer to visitors, who usually give them a few pence for their civility. Greenwich is the great resort of persons whose occupations will not allow them much time for recreation; for every half-hour steam boats leave London and carry passengers at sixpence per head, and the railroad carriages start every quarter of an hour, so that a very few minutes convey persons to a spot where pure air and a delightful park can be enjoyed. Adjoining Greenwich Park is Blackheath; from which very beautiful views are to be seen. Blackheath is nearly surrounded by very beautiful houses belonging to the nobility and merchants;

and Queen Caroline, the wife of George the Fourth, had a house here. Morden College, which was founded by Sir John Morden, a Turkey merchant, more than a century ago, is for decayed merchants, who receive a sum of money sufficient to maintain them, and have handsome apartments allowed them. But the great object of attraction at Greenwich is the Royal Naval Hospital for old worn-out and crippled sailors, who are all dressed in old-fashioned-cut blue coats and blue knee breeches with worsted stockings, and three-cornered cocked hats. They are here well fed, have first-rate medical attendance, and in their cabins, or wards, have good sleeping berths. The pensioners mess, as it is called, together; that is, they take their meals at the same table. There are some hundreds of them; and it is most gratifying to see these men, who have been fighting the battles of their country, some of whom have lost their arms, some their legs, and others an eye, thus bountifully provided for by their countrymen. In addition to the inmates there are a great number of sailors, called out-pensioners, who receive quarterly a few pounds as a reward for their services at sea. On the site of the Royal Hospital was the residence of some of the British monarchs—Queen Elizabeth lived here. It is a beautiful building; the front, by the side of the river, is eight hundred and sixty-five feet long, and has two superb domes, which may be seen for

several miles. It was founded by William the Third, in one thousand six hundred and ninety-four. In the Painted Hall is a capital collection of pictures connected with naval subjects, many of which were presented by George the Fourth, and represent the sea fights of the Nile, Trafalgar, and others; and here are pictures of Nelson, Hardy, and of all the great admirals and captains connected with heroic actions. In Greenwich Park is the Royal Observatory, where astronomical observations are made, and where the calculations are made for publishing the nautical almanacks, which are prepared for the three forthcoming years, and show the hour of the sun's rising, the changes of the moon, and the position the stars will be in for the next three years; and this is done for the purpose of enabling persons in command of ships to tell by observations, and these tables, which latitude they are in. This is a grand institution, most worthy of England; and as correct time to an instant is of the utmost importance to these calculations, chronometers that keep most perfect time are kept here in great numbers, made by all persons who feel disposed to send them for competition, and the most correct receive rewards every year. By observation, and by the best of watches and clocks, they here obtain correct mean time; and, to enable all ships to have their chronometers exact in their time with Greenwich time, at one o'clock precisely

every day an immense black ball, which has previously been hoisted to the top of a building visible for a great distance is dropped, and all watches and clocks are thus proved in their rate of keeping time. To those who are unacquainted with navigation this appears to be a mere toy; but every man who is aware of the difficulties of working a ship in long nights, when they have nothing but stars to guide them and tell them where they are, the value and importance of this observatory will be appreciated. Yes, England is indeed a great nation; she publishes charts for every part of the known sea, where the shoals, the rocks, and the currents are pointed out, and the latitude and longitude are described; and this Nautical Almanack completes the good work.

GUY'S HOSPITAL.—We had an opportunity, through the kindness of a friend, of paying a visit to Guy's Hospital, one of those grand public institutions for the reception of the sick and hurt poor; and where all persons who have served their apprenticeship to learn the healing art, are allowed to attend to see the operations performed, to see the sick prescribed for, and to see anatomical operations performed upon the dead, to teach them how to do such things to the living; and we also saw the anatomical museum in it. It is a splendid establishment. This noble charity has been conducted in such a manner as to restore health and freedom from pain to a

arge number of persons. The average quantity of in and out-patients is from four to five thousand annually. The wards for the patients are very neat and in beautiful order; separate wards are of course provided for the males and females. All the inmates seemed, as far as they could be, happy and comfortable, the number of whom varies from five hundred to five hundred and fifty. In a vault in the hospital are deposited the remains of Mr. Thomas Guy, the founder, who built it in the year 1722, at an expense of £18,493 16s., and about two years after he died, leaving for the purposes of this hospital the sum of £219,499. There was also the remains of a Mr. Hunt, who gave a large sum of money toward this institution. The building is in a quadrangular form, having a middle and two side wings and an excellent yard in the front, in the midst of which stands the monument of the benevolent founder. The hospital, the museum, and the buildings for the officers, &c., stand upon five and a half acres of ground. Oh, happy England! possessing hospitals where the poorest persons receive as much, or more attention than even the rich can command when labouring under sickness, or meeting with accidents; in London only there are several of these. There is St. Thomas's, which contains nineteen wards and four hundred and seventy-four beds for in-door patients; St.

Bartholomew's Hospital, where three thousand seven hundred and twenty-five have been admitted, cured and discharged in one year. There is also a large hospital at Charing Cross, one in connexion with the London University, one called London Hospital, another for the Jews; there is also one for small pox, another for fever, and one for diseases of the eye, where the first-rate men of the medical profession give constant superintendence and advice; one for women when in parturition; and, in fact, an establishment for every species of disease.

CHRIST'S HOSPITAL.—We had an opportunity of inspecting this excellent and useful institution through our kind friend Mr. Rice of Chatham Yard, who gave us a letter to the Rev. Dr. Rice, Master of the Grammatical School, who introduced us to Mr. Brooks, the Steward, and the latter gentleman conducted us through the establishment and gave us all the information relating to it.

This institution was founded in year 1552, by King Edward the Sixth, and the place where it now stands was a monastery called Greyfriars. Charles the Second founded the Grammar School and it has since been encreased by voluntary contributions, eight hundred boys are here lodged, fed, clothed, and liberally educated. The whole expence of the establishment is from fifty to sixty thousand pounds annually and the income is nearly the same. The management is under the

hands of a number of Governors and a Treasurer, the latter is an important man, and is always a member of the Court of Aldermen. The Governors have the privilege of recommending a boy to be admitted, once in three years, and any one might have that privilege by once paying a sum of five hundred pounds towards the institution.

The boys wear a sort of livery consisting of a long blue coat reaching to the ancles, and fastened round the waist with a leather strap, a yellow worsted petticoat worn underneath, yellow stockings, and a small black cap, which they very rarely wear, and we have often wondered when we saw the boys walking the streets of London with their heads uncovered how they escape catching cold. The uniform we think is very picturesque, and more so than the ordinary dress in England; there is something very pleasing to the eye, and indicating gravity and seriousness in it.

The boys we were informed are very proud of their dress on account of its connection with the institution, and from the circumstance of the blue colour of the garment, they are commonly called "Blue Coat Boys" and the Hospital "Blue Coat School."

The principal entrance to the premises is from Newgate Street, and except the New Hall that was built about ten years since, the buildings are very irregular.

We were first shewn into the kitchen and we

found it in very high order and cleanliness ; the boys are allowed bread and butter and milk for breakfast, meat and bread for dinner five days in the week, plum pudding, bread and butter one day, and pea soup and bread one day in the week, and they have table beer to drink as much as they like at dinner time, and for supper they are allowed bread and cheese ; every boy has equal share of provisions and the daily allowance made for them is more than they can eat, and we were told that many poor people were daily fed with their families from the fragments, or what was left by the boys. Great care is also taken for proper management and economy in this department. The articles supplied by tradesmen such as bread, butter, cheese, &c. are the very best of their sort, and the food is prepared with as much attention and cleanliness as in any private family. Ten hundred weight of cheese alone was consumed in a fortnight. There were storehouses attached to the kitchen where the provisions are deposited and daily served out.

The boys rise at six in the morning, take their breakfast at seven, dinner at half past twelve and go to bed after supper at seven, they are allowed to go out of the school every other Wednesday to their friends, besides the vacations at Midsummer and Easter holidays, and every Saturday and every other Wednesday are half-holidays, but they must remain within the limits of the premises.

We were next conducted to a large room at one corner of which was a large boiler, and two rows of troughs in the middle were arranged communicating with it, by means of a number of pipes for conveying hot water and a similar communication with a small reservoir at the other end for cold water; this was the room where the boys washed themselves, and so excellent was the arrangement that each boy had a separate cake of soap, separate taps of water hot and cold, and a towel, so that every possible care for their health and comforts was taken as well as for their education: there are four such rooms, each capable of admitting a hundred boys to wash at once. Their sleeping wards were also very neat and clean, bedsteads of iron were placed in range with a small chest attached to each to place their things in, the rooms are very airy and contain fifty beds, which are all numbered, and their towels numbered accordingly and hung on hooks bearing corresponding figures, so that each boy has his separate towel. There are sixteen such wards and a wardrobe attached to each of them, where the Sunday clothes and clean things are deposited, in fact every one is placed upon a happy equality, so that there is no complaints, or no jealousy among the boys, on the contrary we found them as happy and as comfortable as possible.

An infirmary is maintained for the boys; when they are ill, they have medical aid and all

necessary wants are supplied and the comfort of the patient is most scrupulously studied, in so much that it would be morally impossible for them to be better looked after even under parental care,—however parents are allowed to have their children home in case of sickness if they prefer it.

At half past twelve the bell for the dinner was rung, and we saw the hall which is a large and magnificent room full of all the boys, and narrow tables with benches were ranged along. In the middle against the wall was a pulpit from which the chaplain said grace before the meal, and then pieces of bread and butter were handed round, and the pudding soon followed, each boy had a knife and fork, a wooden spoon and a wooden plate in which he has his pudding or meat, earthenware is not used here because of economy ; they have their milk in wooden bowls, and the soup and meat are also conveyed from the kitchen to the hall in wooden pails and troughs, they also have the beer in wooden vessels, all of which were remarkably clean, so that it is not at all unpleasant to eat or drink out of them ; we also saw that many of the boys could not eat all they had which was a proof that they had quite enough. We were very much pleased in seeing eight hundred children in one room, it is a very beautiful sight.

A splendid and large organ is placed in the

hall upon which the music master played and many of the boys sang what they call an anthem after dinner.

We were very much pleased and struck with the order that generally prevailed throughout dinner, there was no noise, no irregularities, and every one seemed to mind his own; our appearance and costume excited a great deal of curiosity among them, and they generally take a delight in seeing a stranger who comes to inspect their school. We should have mentioned that as the boys are not allowed to go off the premises there are two shops on the spot containing pastry, stationary, &c., for them to spend any little money their friends allow them, these shops are conducted by the families of beadles or porters of the establishment.

We shall now say something about the education, there are separate departments in the school, the boys are admitted about the age of ten, before which in a branch school kept at Hertford, about twenty miles from London, they are taught the first elements of the language and then transferred here, where they remain till they are fifteen, within which time they have a thorough good mercantile education, consisting of the English language, Arithmetic, Geometry, and if the boys are attentive they are by this time sufficiently versed to carry on business.

A certain number of boys are carried through

higher branches of mathematics, algebra, Euclid, trigonometry, geography, greek, latin, astronomy, and are taught navigation. The parents of these youths are bound to provide a ship for them, either in the mercantile or in the royal navy, and as soon as they leave school, they are obliged to go through a severe course of examination at the Trinity House, and then go to sea; thus this useful establishment supplies the wants of the merchants and the admiralty, by sending forth a number of highly qualified and proficient officers to navigate ships, and such officers are eagerly sought after, many of them have done great honour to the school. The celebrated naval commander, Sir Cloudesley Shovel, was educated here.

There are others who are called *Grecians*, they prepare for the Universities at Oxford and Cambridge, and receive much better education than those intended for sea; they generally leave the school at the age of twenty, and after going through the University education, they are appointed ministers of the church of England.

The Grecians have higher privileges, they dine at their own wards, and have separate rooms to themselves to study in.

Our countrymen will now see the utility of this institution, for what can be more conducive to a father's happiness than to see his son settled at this place, where he is fed, clothed, liberally educated, and every comfort for his body and mind studied, and *that* without the least expense to the *father*; it is

a blessing, and we earnestly hope that its patrons may increase and its inmates may become more and more every year.

The internal government of the establishment, together with the economy and the regulation of it, was an object of great admiration to us. The *behaviour* of the students was most praiseworthy, and reflects the highest credit on them. We have in conclusion to return our thanks to the Rev. Dr. Rice, the mathematical master and the steward, for their attention to us, and we cannot refrain hoping, that our countrymen, after knowing the advantage of public education, will be actuated to devote more time and labour to the bringing up of their children, and to get up by subscriptions more schools on the plan of the native education institution at Bombay.

There are a great many other schools in the metropolis, such as Westminster school, St. Paul's school, Foundling Hospital, all of which have been founded by some benevolent person, and have since been supported by voluntary contributions.

The National schools are about forty-three in London, including the suburbs, educating twelve thousand children (boys and girls) and we understand that there are about four hundred of them all over the country, to diffuse the blessings of education among the poor, and where students of all feelings and persuasions are admitted.

Sunday schools are established for teaching such

children as are employed in trade, and consequently have no leisure except on Sundays.

The teachers visit the children at their homes in week-days, to impress their parents with the necessity of inculcating sound principles into their minds, we are informed that upwards of seventy thousand poor children are taught upon this principle, in our opinion a most praiseworthy one.

There are also numerous private charitable institutions for the education of the poor, and where a certain number of children are taught reading, writing, arithmetic, &c., to a certain extent. These are principally founded by benevolent individuals who have left large amounts of money towards the maintenance of these useful objects.

It would be almost impossible for us to give an account of all the educational places in London in our limited work, but we assure our countrymen, that there is perhaps no country where they are so numerous as in England, and happy is the country, which can boast of possessing them.

CHAPTER XIV.

HOUSES OF PARLIAMENT.

WE copy from a periodical work, called Chambers's Edinburgh Journal, the following account of the British Commons House of Parliament:—

“The House of Commons consists of six hundred and fifty-eight members, viz. sixteen barons of the Cinque Ports, eighty knights of the shire for England, twelve for Wales, thirty for Scotland, and sixty-four for Ireland; and three hundred and forty-three burgesses for England, twelve for Wales, fifteen for Scotland, and thirty-six for Ireland. By law these members, in all cases, ought to be elected by the people without any undue influence either from the crown, the peerage, or any other power. Anciently, in the Saxon times, the affairs of the kingdom were regulated in national councils, and such councils were by law to be held twice in every year; but the Commons of England, as represented by knights, citizens, and burgesses, were not specifically named until the

“ latter years of Henry the Third’s reign, when
 “ the brave Simon de Montfort, Earl of Leicester,
 “ caused them to be duly summoned for the pur-
 “ pose of employing their influence against the
 “ arbitrary domination of the crown.

“ In the fourth of Edward the Third (chapter
 “ 14) it was enacted that a Parliament should be
 “ holden every year twice, and more often if need
 “ be ; and this continued to be the statute law,
 “ although frequently violated by our sovereigns,
 “ until after the restoration of Charles the Se-
 “ cond, when an act was passed for the assembly
 “ of and holding Parliaments once in three years
 “ at least, which act was confirmed by William and
 “ Mary soon after the glorious Revolution of
 “ 1688.

“ In the first year of George the First, the
 “ then existing Parliament most treacherously,
 “ under the influence of the crown, enacted that
 “ they should sit for seven years. Many attempts
 “ have since been made to restore triennial par-
 “ liaments, which every judicious writer on con-
 “ stitutional authority conceives to be the surest
 “ safeguard of a people’s liberties, but hitherto
 “ without success ; and our Parliaments now sit
 “ for any period not exceeding a septennial dura-
 “ tion, at the will of the ministry.

“ When a member speaks he addresses the
 “ Speaker only, and is not allowed to speak a

“ second time during the debate, unless in
 “ reply (if he was the mover of the question), or
 “ in answer to personal reflections, or in a com-
 “ mittee of the whole house, into which the
 “ Commons frequently form themselves for greater
 “ freedom. Forty members are requisite to form
 “ a house, nor can any business be commenced
 “ until that number be present. The usual time
 “ of taking the chair is four o'clock, P.M. The
 “ Speaker is elected from the body of the mem-
 “ bers on the first day of the meeting of a new
 “ parliament. In voting the words used are ‘yea’
 “ and ‘nay’. In divisions one party always quit
 “ the house, the number of each being counted by
 “ two tellers of the opposite side, but to this
 “ there is one exception, viz. in committees of the
 “ whole house, when they divide by the ‘yeas’
 “ taking the right, and the ‘nays’ the left of the
 “ chair. The great measure of a reform in Par-
 “ liament, which is now, so happily for Great
 “ Britain, a part of the law of the land, bids fair
 “ to remedy all those abuses in the representation
 “ which had previously rendered the proceedings
 “ of this house the most disgraceful and inconsis-
 “ tent of any portion of the legislature. It is
 “ most probable that after having thus revived
 “ itself, one of its earliest acts will be a return to
 “ the old and more salutary arrangement of trien-
 “ nial, if not annual elections.”

Thus far we copy from the Journal to which we have alluded, and it was written directly after the passing of the Reform Bill.

Before the passing of the Reform Bill, at very many places, the persons who were owners of the houses and land in the small towns, called Boroughs, used to make their tenants vote for such persons as they wished to have chosen members of parliament. And the thing at last became so public that such places were called *Pocket Boroughs*, and a rich Jew for many years was the owner of so many of these places that he returned six or seven members at least, receiving very large sums of money from those who wished to be returned to Parliament. It was notorious that Dukes and Lords members of the House of Lords at that time could, and did cause to be returned more than half the members of the commons, thus destroying the independence of that third estate, as the persons put in by Noblemen were of course obliged to vote as they were desired by their patrons. Others who were in want of money sold their seats thus ; in order to meet the pockets of those who could not pay so large a sum as was required for the whole session, which some times lasted six years, but which was always uncertain as to its duration, an annual payment used to be made of one thousand pounds, or one thousand two hundred pounds for the privilege of being returned.

Now this was considered a very bad system and things continued in this state for many years, until petition after petition having been disregarded, the people almost unanimously declared they would have a Reform or Revolution. Reform was therefore conceded, but as the parties in the House of Commons became so nearly equal that ten votes was considered a large majority out of six hundred and fifty-eight members; and as this was not considered sufficient to carry on the business of the country, and as the party out of power thought if they could get eight or ten more members, they should be ministers of the crown; every place that became vacant was contested as if a matter of life or death. And it is said, the base and grovelling men of both parties did not vote in the early part of the day, and when thirty or forty votes would win an election, thirty, forty, and even fifty pounds a piece have been given to that number of people to sell their votes, their honor, and their consciences. This becoming generally known, it is now quite usual for a large proportion of voters at elections to refuse to promise their votes, that they may keep themselves, as it is thought, in the market for the highest bidder.

A friend of ours who has taken a very active part in elections, informs us, that he has found almost always those parties who have not promised either party, were of that description of people who wished to take money for their votes. But

this is called bribery, and there is a *heavy* penalty attached to it. And why is it not prevented? It is from the heavy penalty that it is not more frequently discovered. The party who gives the bribe, and the person who receives it, are subject to fine and imprisonment, and can never vote again. And if the person who gives the money can be proved to be an agent of the person who is thus elected to be a member of parliament, the member so elected cannot continue to sit in the house, neither can he be returned for that parliament; so that the Reform Bill, although it has removed some of the objections which formerly were urged against the elections, yet from its having admitted a much larger proportion of poor people, bribery is more open, more common, and higher sums are given than before. This will only continue to be carried on to its present extent, whilst parties continue so nearly equal; whenever either party can command a majority of forty, votes will fall in the market; although it will be a long time perhaps before it is quite done away. Yet, when many seats are forfeited—when many have been imprisoned—when many have been fined, and when such people are held up to public execration, this imperfection will be removed.

But notwithstanding all this the British constitution is acknowledged to be the best in the known world, and a perfect model to be imitated by others for the legislation of their coun-

tries. It affords the same protection to the life and property of the peasant as to the nobleman, and makes them both equal in the eyes of Law and Justice. We may observe that it is not formed by despotism or by the whim of great men, but it is the result of a long experience, as all defects have been from time to time considered and remedied in such a manner as to improve, advance, and secure the happiness of the people, and by this mode gradual changes were effected and the system has come to that perfection as to excite approbation even from their enemies.

We have described the House of Commons, but strictly speaking the British Parliament consists of the Sovereign in his Royal capacity, and the three estates of the realm, viz. first, the lords spiritual, second, the lords temporal, both of whom form the House of Lords, and third, the knights, citizens and burgesses who form the Lower House, or the House of Commons. The whole Parliament sat together originally but about the reign of Edward the Third, the Lords and Commons separated and have from that time held their parliamentary meetings apart.

The House of Lords at the present time is thus composed, three princes of the royal blood (dukes,) twenty-one dukes, twenty marquisses, one hundred and thirteen earls, twenty viscounts, two hundred and nine barons, sixteen peers of

Scotland, twenty-eight peers of Ireland, twenty-four archbishops and bishops of England, and four archbishops and bishops of Ireland; and how have these peers who form this House of Lords been made, and what are they? In the earliest ages persons, who were possessed of much land, kept about their houses a great many persons called retainers who followed them to fight, and upon occasions when the king required a number of supporters, he used to summon these land owners at a particular time and place for their assistance and counsel; and this was the first House of Peers. After sometime admirals of the navy and commanders of the army were made noblemen and sent to the House of Peers, sometimes persons have been made noblemen for lending their lives to the King, sometimes if a person has been very troublesome in the House of Commons and been constantly asking for information not pleasant for the Government to give, he has been made a nobleman; if a minister wanted votes upon a particular measure which he was anxious to carry, a peerage has been conferred upon a person to abstain from voting against the question; and if a man who held a little place in the ministry was found to be of no use, and would not resign his situation, he was made a nobleman and sent to the House of Peers. The lawyer who made himself the active instrument of Government and hesitated not to decide

always as the ministry wished him, was made a nobleman and sent into the House of Peers ; a very great many of the House of Lords were made peers because they were owners of Pocket Boroughs and could return several members to the House of Commons.

In the reign of James the First, he was so very poor that he allowed those who felt disposed to buy, actually to buy peerages with money ; in the reign of George the First Sir Robert Walpole, (first minister,) openly and notoriously bought votes whenever he wished to carry any measure, many he bought with money, several he bought by making them Peers. Mind we only speak of these things as we gather them from printed histories of the House of Peers ; it is well known by almost every English person, when and for what every peer was made ; if our journal would admit we could name parties who have been made for all the causes we have stated, and it may be asked of us, thus composed how do they act ? and what manner of people are these peers ? We will tell you it is very many years since that some of these noblemens' ancestors were made peers ; many of them some centuries since, although very many are within a few years, but most of them are passed through two or three generations since they have been enrolled, and from their ancestor's wealth they have been well educated, and several of the peers have been men who by their virtues

and talents have secured themselves the admiration and esteem of their countrymen. (Many it is true pursue a very different course of life and conduct from these,) still virtuous or vicious, talented or half witted, they as noblemen have a right to vote upon all parliamentary questions, and as they are not obliged to be present when they vote, but are allowed to vote by proxy as it is called, that is by allowing some other peer to hold their written authority to vote, it is really possible that a man might be deprived of his senses, be a madman, be in the daily commission of the most offensive crime and yet have his vote every day recorded as a peer of parliament.

Is there then no bright side to this picture? Yes, the House of Lords composed as it is, forms a good safeguard, and is most admirably calculated to uphold the national honour in the strict principle of justice. Times might occur when the people, who return the members of the house of commons, might require such sudden changes in the mode of carrying on the Government, such alterations in taxation, or such modes of electing parliaments, as would be unwise and unsafe as well as dishonest to grant; and yet the people might so order the members of the House of Commons, that they would be compelled to carry the measure; then the House of Lords, who are not answerable to any one for their conduct, would refuse to comply, and thus

would check the measure until persons had time to think coolly upon the business. There is however another check upon the House of Lords and Commons, because no measure that is passed by the Lords and Commons, can be brought into operation without the royal assent being obtained for it.

Several noblemen have been authors. Lord Byron was a famous poet; Lord Holland, Lord John Russell, Lord Morpeth, Lord Mahon, Lord King, and Lord Mulgrave, are well-known as writers, and many others, no doubt, whom we, of course, have not heard of.

On the 25th of February, 1841, accompanied by our kind friend, Thomas Baldock, Esq., who procured for us admission, we paid a visit to the House of Commons, and were allowed to sit in the body of the house, under the Strangers' Gallery, and were separated from the members only by a slight rod of iron. We had previously paid a visit to the House of Commons, through the kindness of our friend, Sir Charles Forbes, but as we then had nobody with us to tell us the names of the members, our first visit lost much of its interest.

This night was a very important night, as it was to be a trial of strength between the Liberals and the Conservatives; and out of six hundred and fifty-eight members, five hundred and ninety-seven were that night present. The question

under discussion was a Bill introduced by Lord Morpeth, a member of the Whig administration, relative to Irish Parliamentary Voters. A Bill of the same name, introduced by Lord Stanley, now a Conservative, but who had been, a short time since, a minister of the Whig government, was so different in some of its clauses, that it appeared all the Conservatives had agreed to vote against the second reading of this Bill, and of course all the Ministerialists were gathered together to vote for it; and almost all the sixty-one members who were not present to vote this evening had, what is called, paired off: that is, a Conservative who wished to be away, agreed with a Liberal who also wished to be away, that neither of them would vote, and this neutralising of each other's votes is called pairing off. We were admitted into the body of the house somewhere about six o'clock on Thursday evening, and there we sat until half-past two on Friday morning, about eight hours and a half. Shortly after we entered the house an influential gentleman among the Conservatives told our friend that the Ministers would have a majority of six, and about eight o'clock he said another ministerial member had posted home from Vienna, and that the majority of votes would most probably be seven; and to prove how accurately he made his calculation, the Ministers had a majority of five; one of the persons who was expected to vote with the Ministerialists voted with the Opposition, and

thus accounted for the variation. The gentleman in question is sometimes called the whipper-in of the Conservatives, that is to say, he urges all to vote, knows where every member is, and if he intends to be in the house or not. This must be a troublesome office.

The present House of Commons is a temporary affair only. The former place where they met was destroyed by fire a few years since; and a magnificent erection for the Houses of Lords and Commons is now building close to the Westminster Hall, and very near to the present building. The Speaker, who is one of the members, is the chairman; he is seated in a raised chair near the extremity of the large room, and where he can see all the members. On his right hand, on seats raised one above the other, the ministers of the day and their friends sit; the most influential on the upper front seat, called the treasury benches, nearest to the Speaker. The opposition members sit on the left hand of the Speaker, and are arranged according to their importance to their party, similar to their opponents opposite. The Speaker is much disfigured by wearing an immense wig of whitish hair and a black gown, and, seated at a table before him, are three persons similarly attired in wigs and gowns, who *are not members*, but are Clerks of the House, and keep the records. And upon the table is laid a beautiful silver gilt ornament, three or four feet long, called the mace. When the house

is in what is called Committee of the House, Mr. Bernal, member for Rochester, sits at the table, and the Speaker does not sit in the chair; but Mr. Bernal, who is called Chairman of the Committees, acts then exactly as if he was the Speaker. In a raised chair, at the opposite end to the Speaker, is seated Sir William Gossett, the serjeant-at-arms, who is to preserve order below the bar, and to take into custody any member, or other person, upon the command of the Speaker, who may do anything contrary to the usages of Parliament; when he wishes to withdraw for a short time, John Clement, Esq., deputy serjeant-at arms, takes his seat. When we entered the house Mr. Gisborne was addressing the house from the ministerial side, and there were not then perhaps one hundred members in the house, and then Mr. Cholmondeley answered from the opposition; Mr. M. J. O'Connell replied to him, and Mr. Tennent opposed the second reading, and Mr. W. Roche spoke in favour of it. This was all what soldiers would call light skirmishing; and now what they call the big guns began to go off. Mr. Shaw, the Recorder of Dublin, from the opposition benches, in a very lengthy but good speech, spoke against the Bill, and this called up the great Irish agitator, Mr. Daniel O'Connell. He spoke upwards of two hours, addressed the house in most energetic terms, imploring the members, for the safety and welfare of Eng-

land and Ireland, "to do justice to Ireland," by placing her upon the same footing as England in all things. He spoke most feelingly—most forcibly, and with his large figure, clear distinct voice, and peculiar Irish pronunciation, he attracted much of our attention, particularly when he said very loudly,—“Grant this Bill, and you “will take away much of my powerful influence: “I call upon you to disarm me by doing justice “to my country.” He was very many times loudly cheered by the members who sat on his side of the house.

Strangers are not allowed to be present in the House of Commons by the strict rules of the house; and, in fact, they are *supposed* never to be present: but in a gallery behind the Speaker's chair are forty or fifty reporters for the different newspapers, who are writing down in short-hand all that is said, and who go out and are relieved at stated periods; and it is a fact that although on the morning of the 26th of February, the debate did not close nor was the division declared, until near three o'clock, every speech that was made in the house was printed just as delivered, in the several newspapers, and, soon after eight o'clock, was laid upon the breakfast tables of the inhabitants of London. The Speaker is supposed to be ignorant of these people being present, as they are behind him; and the strangers admitted by the members into the gallery over which we sat, and the persons

near us who were admitted by the Speaker, would be ordered immediately out of the house if any member were to rise and say, "Mr. Speaker there are strangers in the house," he would then call out, "Strangers must withdraw." And whenever any member chooses to divide the house, that is, to request persons to *vote* upon any subject, all visitors have to go out instantly.

We were, as a matter of course, dressed in our costume; and, sitting in the foremost seat allowed for strangers, we had a capital view of all the members, and could hear remarkably well nearly everything that was said; and consequently every member could see us. We fancied once, when Mr. O'Connell was speaking, that he observed and alluded to us. He was looking towards us, and at that time in his most forcible manner he said, "Mind what you are doing, the eyes of the whole world are upon you;" or words to that effect. It might be fancy, but such was our impression at the time.


After Mr. O'Connell had finished his speech, Sir Robert Peel, (who was formerly first minister of the crown, and who has been for some time leading man of the Tory party,) rose, and looking very angrily at Mr. O'Connell, attacked him for sometime for the threats that he (Mr. O'Connell) had indulged in towards England; he said "He has spoken in a tone totally unworthy of the representative of the Irish people. In a tone and

“temper unworthy of that character ; such as I never heard. I do not complain of the high tone which that honorable and learned gentleman takes, but I do complain of the apparent delight with which he gloated on the past animosities between the two people.” Sir Robert also said, “I believe you libel your country ; you libel your country when you insinuate that they would not join us in repulsing the attacks, either of France or America.” In making these observations, he seemed as if he was much angry and could not control his feelings. We think a good debater should never lose his temper ; if he does, we think he may sometimes lose sight of his argument. After a little more than a quarter of an hour, the violence of Sir Robert Peel towards Mr. O’Connell appeared to abate, and he then went into the merits of the proposed measure, and calmly stated his views and opinions in very fluent language. Mr. O’Connell, after Sir Robert had finished his personalities, packed up his papers, made his bow to the Speaker, and left him to his two hours’ speech. And we think him a great speaker, but his actions were odd, as he kept thrusting one of his hands out between the flaps of his coat, and swinging himself round. We should have called him an orator, but for his losing his temper. Still we should say he reasoned well, and his speech appeared to make a great impression upon his side of

the house. The cheers were loud and often, and he appealed in very strong language to the Ministers of the Crown, who sat opposite to him, as to what they would do upon certain other questions with their now sworn friends, Mr. O'Connell and his partisans. At all events, Sir Robert Peel seemed determined again to go at length into the details of the question, and to oppose it with all his power. We could but smile at the loud cheers and the enthusiasm that was shewn then to him by his party, among whom, we were informed, he was a short time since rather unpopular, in consequence of his not having moved quite so quickly or violently as they wished, so that we fancied the mass within doors were almost as fickle in their minds as the mob without doors.

Lord John Russell a minister of the crown, and the political ministerial leader of the House of Commons, then rose, and we were surprised to find that he did not speak fluently ; he appeared to have an impediment in his speech, but after a little while he shook off his apparent impediment, and he, for nearly two hours, spoke principally in explanation of the question before the House. His side of the House cheered him quite as loudly as Sir Robert Peel had been cheered. We looked at him, he was a little pale looking man, with a tolerably loud voice, but not harmonious, and his action, although energetic, was not altogether pleasing.

But after all these people had spoken, and argued, to gain converts as it were, the result was nearly as it had been foretold at an earlier hour in the evening. For upon a division the ministers of the crown had only a majority of five. So that all these long speeches might have been spared, and all the members of the House, the messengers, and the reporters, might for all the good effect the debate had had, all of them been quietly enjoying their night's rest. We were told that this was a grand trial of strength, and if the ministers had not had most votes with them, conservatives would have changed sides in the house, and the liberals would no longer have been ministers. We saw in addition to those who spoke, several members of whom we had heard much—Sir James Graham, Lord Stanley, Lord Morpeth, Lord Howick, Mr. Hume, Mr. Byng, who has been more than fifty years member for Middlesex, Sir John Hobhouse, Mr. Bernal, Sir Charles Adam, and a host of others. This is an evening that we shall never forget. We consider it the most exciting eight or nine hours that we ever spent, and yet upon the whole we were disappointed. We had expected to have seen the representatives of all the wealth, all the talent, all the resources of the country, better dressed and a different looking set of men. We saw them with their hats upon their heads for the last two or three hours sleeping in all directions, and only opening their eyes now



and then, when a cheer louder than common struck upon their ears ; still such an assemblage of men holding the destinies of millions in their hands, we may never again see.

On Friday, the 26th of February, 1841, our friend Mr. Baldock, having procured a letter of introduction, accompanied by him, we paid a visit to the House of Lords; we went at four o'clock, and as there was nothing of much importance expected to come before the House, the Lord Chancellor was not expected to take the chair, but instead thereof, Lord Shaftesbury, who is the chairman of committees for the House of Lords, was just about to take his seat on the Woolpack, which is a seat at the upper end of the House in front of the Throne. He was preceded into the House by Mr. William Butt, deputy sergeant at arms, who carried before the earl the beautiful silver gilt mace, which he laid upon a seat before him in the House. We here beg to acknowledge the very great kindness we then received from Mr. Butt, who is a hearty old gentleman, not looking more than sixty, but who told us he was upwards of seventy, he took us into the gallery through which the Queen passes to the throne. And we have also to thank James Pulman, Esq., Yeoman Usher of the House of Lords, who, whilst we were at the bar of the House, was kind enough to point out the several noblemen present ; of bishops there were three, London, Exeter, and Ripon.

The same rule is observed here as in the House of Commons, the ministerial peers sit on the right hand of the Speaker, and the opposition on the left hand. We saw the Duke of Wellington; his grace had been attacked with sudden indisposition a few nights previously in the House of Lords, and as soon as Lord Brougham came in, he went over to the Duke of Wellington, and taking one of his hands between both his, he expressed his hope that he was recovered, and his joy at seeing him out. Although it was not a day of much business we saw Lord Melbourne, first Lord of the Treasury and Prime Minister, Lord Normanby, the Lord Lieutenant of Ireland, Lord Minto, first Lord of the Admiralty. And we heard Lord Brougham twice speak. Lord Mount Edgcombe presented a petition relative to the removal of packets from Falmouth, and praying they might be allowed still to proceed from thence, so as to benefit the county of Cornwall, upon which Lord Melbourne answered him as a minister of the crown. Lord Mount Edgcombe replied, and then Lord Minto spoke. It was but a short meeting, but we saw some of those we wished to see, and we had an opportunity of hearing them speak. The Duke of Wellington and Lord Brougham came down close to where we were. The apartment in which the Lords now assemble, was formerly the painted chamber; over the bar, where we stood is the gallery for the use of the reporters

and for such persons as are admitted by peers' orders. The place where we stood, below the bar, is always open to the members of the House of Commons. Strangers of all sorts are supposed not to be present at the House of Lords, and are excluded upon all divisions.

Westminster Hall, adjoining nearly the House of Lords and Commons, is considered to be the largest room in length unsupported by pillars. It is two hundred and seventy feet long and seventy-four feet broad. Parliament was frequently assembled in this hall, and here was held the ancient court of justice, in which the king presided. In Westminster Hall, the kings of England have always had their coronation feasts; it is also generally used for the trial of peers accused of high treason, or other crimes against the state, and it was in this hall that Charles the First was tried. The Court of Exchequer, Court of Chancery, King's Bench, and Common Pleas, being the great law courts, are here all held under this Roof. Opposite this hall is a very beautiful Collegiate Church called Westminster Abbey, it is said to have been built in 1220. Here all the kings and queens of England have been crowned, and here also very many of them previous to George the Third are buried; he, and all since him, have been buried at Windsor. Here also most of the nobility, many of the poets and philosophers, and very many of the great men of England have been buried.

CHAPTER XV.

POLICE AND CRIMINAL COURTS.

WE consider that we should speak of the police courts of London; every district has one, Bow Street, Hatton Garden, Thames Police, and others have a paid magistrate who is constantly sitting to hear charges for robberies, assaults, &c. We went to one adjoining the Guildhall, where one of the Aldermen of London was sitting as a magistrate. The Aldermen of London are not paid for acting as magistrates, and as the course pursued there is similar to what is usual at all the courts, a brief description may not be uninteresting to our countrymen. The magistrate sits on a raised chair so as to command a full view of all the court, and on a seat immediately behind him, is a lawyer, called the magistrate's clerk, and whose duty it is to explain to the magistrate any doubtful point, as to whether it is proper to send the prisoner to gaol for trial, or to remand the case to a future day, or to let the prisoner out upon security that he shall appear when called upon to meet the charge, or to

let him go at large from not having sufficient evidence to commit him.

The case under investigation when we entered, was a charge made by a person, we believe a tailor, against a respectably dressed good looking young woman, who, there was reason to apprehend gained her living by prostitution, to the following effect. He was first sworn upon the Christians New Testament of their scripture to speak the truth, and having the book in his right hand, and having *kissed the book*, he was allowed to state, that on the previous evening at a very late hour, he and his foreman were coming down Cheapside after all the shops were closed, and he then had his purse in his pocket with rather a large sum of money in it; that the young woman addressed him wantonly, and put her arm once or twice round his person, and that he almost immediately missed his purse, that he called for the police, and upon one of those men approaching, the young woman ran up a passage where they soon followed her, but could not, upon her nor in the court or passage, find the purse. To all these facts the foreman and the policeman were sworn, and the tailor was very closely questioned as to the certainty of his having had the purse when the young woman approached him.

This is the usual course pursued at all police courts. We should have mentioned that a spot opposite the magistrates is railed off from the

court, and at a raised spot the parties charged with offences are placed with the policeman or gaoler who have them in charge. In a spot between the prisoner and the magistrate are raised seats for solicitors or barristers who may come to bring the charges or to defend the prisoner, and there is room for forty or fifty spectators to hear what is going on; and at most of these police courts a reporter from the newspapers attends to report in their papers such things as are deemed interesting. All these courts *are open to the public.*

When a prisoner is committed for any offence, he is furnished with a copy of the evidence that has been produced against him, in order that when he is tried he may prepare his defence. And he has also before his trial a copy of the bill of indictment that is preferred against him, that his solicitor may see if he has any good defence to offer. When the sessions, as they are called, come on, most respectable persons are summoned upon, what is called, the grand jury. And all the witnesses who went before the magistrate to swear to the commission of the offence, have then to go before twenty-four of these persons called the grand jury, in a room attached to the sessions house, and there they again swear to all they know of the matter. If the jury are satisfied *that the prisoner committed the offence*, they find "a true bill" that is, they think the bill of indictment containing all the charges, contains sufficient

proof of the fact to put the prisoner upon his trial, otherwise they write upon the back "not a true bill" and the prisoner is then entitled to his discharge from prison, and is to be considered *as quite innocent*.

When a true bill is found, thirteen respectable persons (who occupy houses rated to a certain amount, or who are possessed of a house or houses of their own) are sworn as a jury to say "guilty, or not guilty," according to such evidence as may come then before them, and a barrister of some standing and of high legal knowledge presides as a judge. The judge is dressed in a wig something like that worn by the speaker of the House of Commons, and a large red gown or cloak, and the seat in which he sits is considerably raised, having a gallery round it in which magistrates sit. On the right hand of the judge separated from the rest of the people are the jury, who as soon as they are sworn, select one of their number for their foreman and who usually puts any questions they may require, and returns their verdict of "guilty or not guilty."

In a sort of pit below are a number of sallow-looking men, dressed in black gowns with powdered wigs with little tails, and these are called barristers. At a bar, in front of the judge, stands the prisoner with the gaoler, or one of his assistants by his side in charge of him; and he is first arraigned by the Clerk of the Peace saying, "You

“stand charged with ——,” naming the offence ;
 “What say you? are you guilty, or not guilty.”
 Most usually the prisoner answers (which is called pleading) “Not guilty.” Upon which he is then asked, “How will you be tried?” and he replies, “By God and my country.” The jury then are called over who are to try him; and if he sees, when they come to be sworn, any persons whom he thinks would not do him justice, he objects to their being sworn in, and others are then called in their place. One of the barristers then, addressing the judge and the jury, opens the case, as they call it, by stating what the prisoner is charged with, and then proceeds to call and swear the witnesses to prove the charge. As soon as the barrister who is counsel for the prosecution has got the witness to state all he knows about the matter, the counsel for the prisoner then rises and proceeds to cross examine the witness; and to a person unacquainted with the object in view, it would rather appear that the court was assembled to inquire into the respectability of the witness under examination, and whether he was to be believed upon his oath, rather than to ascertain whether the prisoner at the bar was “guilty” or “not guilty.”

In order however to make this sort of thing more clear we will describe an actual scene as told to us by a friend. It was some years since and a gentleman who had dined with some friends

at Rochester and took too much wine was proceeding from that place to London in a post chaise alone, and being under the influence of wine fell asleep, he roused himself at Dartford, where he had fresh horses, and a few miles nearer to London at the foot of Shooters' Hill, his carriage was stopped by a robber on foot with a piece of crape over his face and a pistol in his hand, who awakened him, and took his money and watch. Whilst he was doing this his crape fell from his face and the post chaise driver looked round (for it was a very moonlight night) and took such notice of his features, that upon shortly after meeting with a mounted patrol he gave such a description of the robber, that he was almost immediately after taken into custody, and being sworn to by the chaise driver was committed for trial; for his defence he procured the services of Mr. Garrow, (who afterwards became the Judge Sir William Garrow) and as the gentleman could not from his intoxication at the time recognize the man, all the actual proof rested with the chaise driver; and after he had sworn most positively and unreservedly to the person of the prisoner, and was about leaving the witness box, Mr. Garrow said, "My friend, just one word with you; where did you dine to-day?" He answered, "Why, if you *must know*, I dined at the 'Three Tuns.'" "Well, then," said Mr. Garrow, "was not your first toast after dinner, 'Success

"to the cause?" You know you are to get
 "forty pounds if you get this man hung." He re-
 plied, "I don't know anything about toasts; that
 "a'n't got nothing to do with this trial: reward
 "money will be pretty well mulcted by thief taker
 "and lawyer afore it comes to me." "Come, come,
 "come," said Mr. Garrow, "don't you lose your
 "temper, you know you've come here to-day to
 "swear this man's life away. *Now, remember*
 "*you are upon your oath, Sir*: you never saw this
 "man before that evening; you merely turned
 "round upon your saddle and caught sight of his
 "face for a few moments. *Now, Sir, do you mean*
 "*to swear* the unhappy prisoner at the bar is the
 "man." The driver replied, "Yes, *I know he was*
 "*the man.*" "Very well, Sir," said Garrow,
 "mind what you are about. Now, you never
 "saw me before to-day, did you?" "No,
 "never." "Very well, then, Mr. Post-boy.
 "Now, suppose I was to come up the Rochester
 "road to London, stop at the Bull and George at
 "Dartford to change horses; the first-turn boy is
 "called, and with the fresh horses out come you.
 "*Now, Sir, look at me.* I have now got my wig
 "and gown on; and do you mean to say that by
 "just catching a slight peep at me, dressed, mind,
 "in quite different clothes—I mean to ask you—
 "*now look at me hard*—could you swear to me?"
 Garrow gained his point; the witness lost his
 temper, and answered, "Know you, d—— you!"

"Yes, I'd swear to you through thick and thin, "d——you!" The Judge turned towards one of the officers of the court, and said, "Let that "impudent vagabond be turned out of court "immediately. I do not hold a fellow like that "deserving of credit." And this is what is called breaking down a witness by cross-examination.

But to proceed with our description of a criminal court, witness after witness is examined and the prisoner is then called upon for his defence and he sometimes endeavours to, prove what is called an Alibi, that is that he was in another place when the offence was committed; and at other times produces a host of witnesses to prove his hitherto unimpeachable good character. After which the Judge reads over what every witness has said, usually making remarks upon what they have each sworn to; and then the Jury turn round and consult with themselves upon the evidence and the Clerk of the Peace says to them; Gentlemen are you agreed in your verdict, is the Prisoner "Guilty" or "not Guilty," upon which the Foreman replies guilty or not as the case may seem to them, the Clerk then says 'You say the Prisoner is guilty, *that is your verdict* and thus we say all.' The Judge then proceeds to pass sentence; if for murder he sentences the prisoner to be hung by his neck until he is dead. There are numerous offences where great discretionary power is left with the Judge; in sentencing he

may transport for life beyond the seas to work in chains as a convict, or he may imprison for a few hours; and this power is left that a judge may discriminate whether it is an old hardened offender or one new to crime.

We should have mentioned that all the twelve persons composing the Jury must be of one mind, and it has frequently happened that one obstinate man has for hours prevented a Jury from returning a verdict; after they have retired to consider their verdict, they are not allowed fire, candle, victuals nor drink, and they are shut up until they can agree; and it is said that two or three have held out in their opinions fourteen or sixteen hours and brought round the other portion to their way of thinking.

CHAPTER XVI.

EXHIBITIONS OF THE FINE ARTS.

COLISEUM.—We paid a long and very pleasant visit to a building at the south end of Regent's Park, called the Coliseum ; it has a portico called Doric, and a circular roof rising from a polygon of sixteen facings and occupies an area of four hundred feet. It was built for the purpose of exhibiting a panoramic view of London and the country for several miles round London, as it may be seen from the upper part of the steeple of St. Paul's Cathedral Church ; all the sketches were actually taken in 1821, by Mr. Horner, when repairs were going on and scaffolds were erected, and it was painted from those sketches by Mr. Parris upon canvass ; the walls of the building are eighty feet high and the top of it is one hundred and twelve feet from the ground, the dome is seventy five in diameter and attracts universal attention from its singular shape, as well as its immense size. There is machinery that raises you to view the panorama if you wish to

decline the trouble of walking up stairs. The space of canvass that it is painted upon is said to be 46,000 square yards, and the correctness of every building that is represented, (and every building in London is shewn here,) is of that nature that we quite forgot we were looking upon a picture. But we fancied we were indeed looking from a high building upon reality. No language that we can use can possibly convey our feelings. It must be seen before any one can imagine the fidelity with which every thing, every place, is pictured. You see from a gateway a coachman driving out a stage coach, his horses are just out of the stable and full of life, and upon getting into the street they are all terrified, and you see the coachman troubled to get them together, and you are about to call to the people to take care of themselves. The illusion is complete throughout. If there is any locality with which you are intimately acquainted, any building which has any peculiarity attached to it, look to that spot and you will see the broken turret or the painted chimney, or the gothic window, every thing however minute is particularized, and it is one of the greatest works of art ever achieved.

The architect was Mr. Decimus Burton, it was commenced in 1821, and finished in 1827, and must have cost an immense sum of money. You pay one shilling for admission. We stood gazing upon this painted representation of London

and as we looked upon the various prominent buildings, forgetful that it was but a picture, we could not but think what an extraordinary place, taken as a whole, London is. We had understood that it now occupies eighteen square miles of surface and that the circumference is upwards of thirty miles. That there are twelve thousand streets, nearly two hundred thousand houses, and with strangers, who are constantly visiting London, there are perhaps two millions of people every day in that space ; and that by far the greater proportion of this immense population have either by head or by hands to obtain their daily sustenance. We thought of the splendid shops of all descriptions, of the immense wealth contained within these shops. Take for instance a first rate silversmith, or silkman, or watchmaker, or linen draper, or cloth seller, or glass dealer, or china man ; and think how many thousands of pounds are within each of their shops. And here we would wish to remove an error in which many of our countrymen are. Most of the natives of India are of opinion that in England only particular people in each trade can produce, and *do sell*, first rate genuine articles. We tell them that *in all trades* there are *very many* respectable persons who sell goods equal in quality to each other, and at the same fair prices. The greater number of respectable shopkeepers would sell to a child of twelve years old as honorably

and as fairly as to a person of mature age. But always bear this in mind, really good articles, well manufactured of the best materials although apparently a little dearer, are cheapest in the end. They who profess to sell cheap cannot procure a good article at less than their fair dealing neighbours. And we would say be careful how you deal with a man who advertises extensively. You are quite sure you and every customer must pay part of his advertisements, or else get an inferior article to that made by the man who spends no money upon advertisements, and never deal at a shop that has two prices, asking in the first instance more than they mean to take. One very great advantage in the shops of England is that they are all numbered, and the names of the owners, together with their respective trades are upon the door or door posts. They also have their name, place and trade printed on cards, which they give you in order that you may not forget them and know the particulars if you should require to go in future. These practices we would strongly recommend to be adopted in Bombay. You will in passing the streets have bills thrust into your hands of *cheap shops*, tailors who profess to make a suit of clothes of best cloth for less money than the cloth is to be purchased at. These are men who have glossy shewy cloth that wears rough and will not last. You have Tea dealers offering to sell Tea at a less price than it

is to be bought of that description at wholesale prices, this is inferior or else adulterated Tea ; in February, 1841, a person was detected in London who collected leaves of Tea after they had been used, and by a poisonous process gave them the appearance of Gunpowder Green Tea and sold them to be mixed by professed Cheap Tea dealers.

In every trade there are these cheap professors, knives, scissars and razors are made to sell, *not to cut*, plated goods are manufactured with so little silver that they will not bear a second time cleaning. Glass which has been cast in moulds is sold for cut glass. Cotton shirting is stiffened up, glazed and sold for flax shirting. Cabbage leaves are steeped in tobacco water and made into cigars. Cheap printed cottons are sold that will not wash. Watches are made that only go whilst you carry them. Every trade has its disreputable branch. And the Jews are the principal sellers of these inferior articles. There may be and no doubt are honourable exceptions among them. But it is seldom safe to deal with them ; they always ask three or four times as much as they intend to take for their articles. They call God to witness their articles are first rate, and it is of very rare occurrence, that any person has any dealings with a Jew, but what he discovers in some way or other that he has been cheated.

We therefore say always deal at a reputable shop. Whenever you see a shop pretending to sell "Bankrupts' Stocks at great sacrifice," whenever you see a shop with goods to be sold at "immense sacrifice" pass it quietly by and go to some quiet business like shop not where there is a long train of carriages waiting at the door, because there if you walk in, you are not waited upon until the carriage company are all served. Also avoid making purchases at a shop where the front is very handsomely decorated and extravagantly fitted up, if you do you must contribute to the folly of the owner by paying in proportion for the shew, besides that of the actual worth of the article you buy. These shops are frequented by those who care little for money; but for a man of moderate fortune they are much more pleasant to look at and admire than make purchases at.

You will also read in newspapers advertisements for pills which cure "*all sorts of head aches*"—"dinner pills"—"antibilious pills"—"cough drops" with long comment upon their good qualities, and often testimonies of those who have been relieved by using these medicines. Do not believe a word of it, all this is put in the papers by persons who know nothing about medicines, (they are called "Quacks" in England) who make large fortunes by preparing and selling these medicines, and they are mixtures of a great many spurious drugs. Many valuable lives have been lost by taking

things prepared by these unprincipled men, many of whom have been tried and punished for administering to patients such medicines, as were calculated to increase the distemper rather than cure it. For instance can a man of common sense believe that one suffering head-ache brought on by drunkenness, another suffering it through the want of food, and the head ache of a third proceeding from a severe fall or from watchfulness and anxiety can be treated in the same way ? And yet you find it asserted in a most solemn tone that one particular thing does equally well for all.

The best advice we can give to our readers is this. If you want medical aid and are not in a position to procure it, go to one of the commonest Druggists, who knows the properties of articles he gives you, but do not for one moment rely upon all the nonsensical puffs and advertisements you read in the newspapers about these *misnamed* medicines.

But we have now to speak of the great civility that we have always received in shops ; they are anxious to shew you things even if you do not buy, and however small the amount you may purchase, they are always anxious to send it home for you. You see in all the shops respectable well-dressed assistants ; and it is to us most astonishing, considering the great number of shops of every description, how the proprietors of them manage to get a living. It is a fact, that in some of the

large silk mercers and dealers in threads, tapes, &c., nearly one hundred young men are kept and boarded upon the premises, all of whom besides have a good salary. Then when we consider the rent and annual outgoings, is it not wonderful how they make it answer? But a large proportion of the citizens of London with their families live in superb country houses at Holloway, Highbury, Islington, Paddington, Blackheath, or in some other of the environs of London. And here they have large and expensive establishments; their wives and families are quite shocked if you name the shop. They keep in very many instances a carriage with two male servants and three female servants. They, when they give dinner parties, have three or four courses of seven or eight dishes each course, have five or six sorts of wines, and bring up their sons and daughters with much expense at very high priced schools, thus unfitting them to serve behind counters, and yet these people who live at more expense than half the respectable portion of people of independent property, often talk of the badness of the times, and wonder at their neighbours not thriving in the world; unfortunately this class of people forget who and what they are. Their wives lavish upon their dress and that of their daughters, more than ought to keep their families, and if we knew the real history of half of the shopkeepers, who in modern days have become bankrupts and robbed their creditors, we

should find it arose from their country houses and their wish to outdo their neighbours.

We shall now present, from the well known paper entitled the *Connoisseur*, published in 1754 by Mr. Bonnel Thornton and Mr. George Colman, an article descriptive of the London citizen of that time spending the Sunday in his country box.

“ The London citizen of the reign of George
 “ the Second. In those dusty retreats where the
 “ want of London smoke is supplied by the smoke
 “ of Virginia tobacco, our chief citizens are ac-
 “ customed to pass the end and the beginning of
 “ every week. Their boxes (as they are mostly
 “ called) are generally built in a row, to resemble
 “ as much as possible the streets in London.
 “ Those edifices which stand single, and at a dis-
 “ tance from the road, have always a summer
 “ house at the end of a small garden ; which
 “ being erected upon a wall adjoining to the
 “ highway, commands a view of every car-
 “ riage, and gives the owner an opportunity of
 “ displaying his best wig to every one that passes
 “ by. A little artificial fountain, spouting water
 “ sometimes to the amazing height of four feet,
 “ and in which frogs supply the want of fishes, is
 “ one of the most exquisite ornaments these
 “ gardens have. There are besides (if the spot of
 “ ground allows sufficient space for them) very
 “ curious statues of Harlequin, Scaramouch,

“ Pierrot and Columbine, which serve to remind
 “ their wives and daughters of what they have
 “ seen at the play-house. I went last Sunday, in
 “ compliance with a most pressing invitation from
 “ a friend to spend the whole day with him at one
 “ of these little seats, which he had fitted up for
 “ his retirement once a week from business. It
 “ is pleasantly situated about three miles from
 “ London, on the side of a public road, from
 “ which it is separated by a dry ditch over which
 “ is a little bridge consisting of two narrow
 “ planks leading to the house. The hedge on the
 “ other side the road cuts off all prospect whatso-
 “ ever, except from the garrets, from whence
 “ indeed you have a beautiful vista of two men
 “ hanging in chains on Kennington Common,
 “ with a distant view of St. Paul’s cupola, enve-
 “ loped in a cloud of smoke.

“ I set out on my visit betimes in the morning,
 “ accompanied by my friend’s book-keeper who
 “ was my guide, and carried over with him the
 “ London Evening Post, his mistress’s hoop and
 “ a dozen of pipes, which they were afraid to trust
 “ in the chair. When I came to the end of my
 “ walk I found my friend sitting at the door in a
 “ black velvet cap, smoking his morning pipe.
 “ He welcomed me into the country and after
 “ having made me observe the Turnpike on my
 “ left and the Golden Wheatsheaf on my right, he
 “ conducted me into his house, where I was re-

“ceived by his lady who made a thousand apo-
 “logies for being caught in such a dishabille.
 “The hall (for so I was taught to call it) had its
 “white wall almost hid by a curious collection of
 “prints and paintings. On one side was a large
 “map of London, a plan and elevation of the
 “Mansion House with several lesser views of the
 “public building and halls, on the other was the
 “Death of the Stag, by the happy pencil of Mr.
 “Henry Overton finely coloured, close by the
 “parlour door there hung a pair of stag’s horns,
 “over which there was laid a red roquelaure and an
 “amber headed cane.

“When I had declared all this to be mighty
 “pretty I was shown into the parlour, and was
 “presently asked, who that was over the chimney
 “piece. I pronounced it to be a very striking
 “likeness of my friend, who was drawn bolt
 “upright in a full bottomed perriwig, a laced
 “cravat, with the fringed ends appearing through
 “a button hole, a black livery gown, a snuff
 “coloured velvet coat with gold buttons, a red
 “velvet waistcoat trimmed with gold, one hand
 “stuck in the bosom of his shirt, and the other
 “holding out a letter with a superscription ‘To
 “Mr —, Common Councilman of Farringdon
 “Ward Without.’ My eyes were then directed
 “to another figure in a scarlet gown, who I was
 “informed was my friend’s wife’s great uncle, and
 “had been sheriff and knighted in the reign of King

“ James I. Madam herself filled up a pannel on
 “ the opposite side in the habit of a shepherdess,
 “ smelling to a nosegay and stroking a ram with
 “ gilt horns.

“ I was then invited by my friend to see what
 “ he pleased to call his garden, which was nothing
 “ more than a yard about thirty feet in length,
 “ and contained about a dozen little pots ranged
 “ on each side, with lilies and cockscombs sup-
 “ ported by some old laths painted green, with
 “ bowls of tobacco-pipes on their tops. At the
 “ end of this garden he made me take notice of
 “ a little square building surrounded with filleroy,
 “ which he told me an alderman of great taste
 “ had turned into a temple, by erecting some bat-
 “ tlements and spires of painted wood on the
 “ front of it.

“ After dinner, when my friend had finished
 “ his pipe, he proposed taking a walk that we
 “ might enjoy a little of the country; so I was
 “ obliged to trudge along the footpath by the
 “ road side, while my friend went puffing and
 “ blowing, with his hat in his hand and his wig
 “ half off his head. At last I told him it was
 “ time for me to return home, when he insisted
 “ on going with me as far as the half-way house
 “ to drink a decanter of stingo before we parted.
 “ We here fell into company with a brother livery-
 “ man of the same ward, and I left them both
 “ together in a high dispute about (Elizabeth)

“ Canning, but not before my friend had made
 “ me promise to repeat my visit to his country
 “ house the next Sunday.

“ As the riches of a country are visible in the
 “ number of its inhabitants and the elegance of
 “ their dwellings, we may venture to say that the
 “ present state of England is very flourishing
 “ and prosperous; and if the taste for building
 “ increases with our opulence for the next cen-
 “ tury, we shall be able to boast of finer country
 “ seats belonging to our shopkeepers, artificers,
 “ and other plebeians, than the most pompous
 “ descriptions of Italy or Greece have ever re-
 “ corded. We read, it is true, of country seats
 “ belonging to Pliny, Hortensius, Lucullus, and
 “ other Romans. They were patricians of great
 “ rank and fortune; there can, therefore, be no
 “ doubt of the excellence of their villas. But
 “ whoever read of a Chinese bridge belong-
 “ ing to an Attic tallow-chandler or a Roman
 “ pastry-cook? Or could any of their shoemakers
 “ or tailors boast a villa with its tin cascades,
 “ paper statues, and gothic root houses? Upon
 “ the above principles we may expect that poste-
 “ rity will perhaps see a cheesemonger’s Apiarium
 “ at Brentford, a poulterer’s Theriotrophium at
 “ Chiswick, and an Ornithonomeion in a fish-
 “ monger’s garden at Putney.

“ As a patriot and an Englishman I cannot but
 “ wish that each successive century should increase

"the splendour of Great Britain; but I should be
 "sorry that this abundance of wealth should
 "induce our good citizens to turn their thoughts
 "too much upon the country. At present we
 "are deprived of our most eminent tradesmen
 "two days out of six. It is true the shopkeeper
 "and the travelling part of his family, consisting
 "generally of himself, his wife, and his two eldest
 "daughters, are seldom sufficiently equipped to
 "take leave of London till about three o'clock on
 "Saturday in the afternoon; but the whole morn-
 "ing of that day is consumed in papering-up
 "and mending, bottling brandy punch, sorting
 "clean shirts and nightcaps for the children, pin-
 "ning baskets and cording trunks; as again is the
 "whole afternoon of the Monday following in
 "unpinning, unpadding, locking-up foul linen,
 "and replacing empty bottles in the cellar. I am
 "afraid, therefore, if the villas of our future trades-
 "men should be become so very elegant, that the
 "shopkeepers will scarce ever be visible behind
 "their counters above once in a month."

When we looked upon the immense number
 of Churches, Catholic Chapels, Dissenting places
 of Worship, Jews' Synagogues, and all those
 varied places that are set apart in London for the
 different modes of worship, we could but think
 what extremely odd creatures men were; and we
 said to ourselves, 'Oh, that all those places were
 what they appear to be, and what they were pro-

fessedly built for! *for men to pray to their God therein for all the human race, and to offer thanks to their Maker for the numerous benefits bestowed upon them*; instead of which some of them, it is to be regretted, are used to find fault with each other's creed, and to point out the rocks and shoals upon which other sects have split, instead of looking out for the whirlpools into which they are themselves rapidly gliding.' Oh, we thought, would that religion in England was not taken up as a trade! would that charity and brotherly love were preached up and acted upon, instead of finding faults with their fellow brethren, and exciting each other to bitter religious hatred, which has for centuries past thrown discord among men, and severed the dearest ties of friendship and love in society. Here we looked down upon something like two hundred churches, upwards of two hundred dissenting places of worship, nearly twenty Roman Catholic chapels and Jews' synagogues.

The streets of London attract the attention of every stranger. They are all paved with stone, and a broad flagged stone path on each side for foot passengers: they are brilliantly lighted with gas. The mud is constantly scraped up and taken away in carts by scavengers; and there are drains called sewers under all the streets for the water to run off through iron gratings, and thus into the river Thames.

We could particularly mention Regent Street,

and Regent's Quadrant and Circus, as containing some of the finest and best furnished shops in the world. Oxford Street, Holborn, Cheapside, Fleet Street, and the Strand, have all capital shops, in which all the productions of the known world can be obtained. But in these places, with all the care that can be used, after a heavy rain the streets are in a most dirty condition, and foot passengers can scarcely cross without a chance of getting over their shoes in mud; and then the neverceasing noise in Cheapside, or any of the great thoroughfares, obliges you to quite distress yourself in talking loud to make yourself heard by your friends.

The squares at the west end of London are composed of princely houses fit for palaces. There are gardens in the centre of each square, with many shrubs, railed round with iron palisades; and the carriages of the nobility and the gentry that are constantly passing and repassing, give an air of life and gentility quite opposed to the heavy carts, waggons, and omnibuses which are always rumbling about in the city. We could talk almost for ever of the magnificent view of the Coliseum. We think it a master-piece of human ingenuity, and we would say to our own countrymen who visit England, and to such Englishmen who have not yet seen it, that there is nothing in London that will better please them than the Coliseum, and that for only one shilling.

Below there is a saloon, where statues of eminent men are in great number.

THE NATIONAL GALLERY.—This is a very large building situated in Trafalgar Square; Charing Cross, where a number of beautiful paintings and pictures are exhibited to the public without any charge being made. The building was erected at a cost of £75,000 by the government, and the first stone was laid in 1834. It consists of a centre and two wings; the whole length is four hundred and sixty-one feet, and width fifty-six feet, and occupies the whole of the north side of Trafalgar Square; it is an immense pile of building, but the appearance is not very pleasing, and regular. The eastern wing is appropriated to the Royal Academy of Arts, and the western wing for the exhibition of pictures of the National Gallery.

The foundation of this latter Gallery was the collection of Mr. Angerstein, a merchant, purchased by government for £60,000. and many additions have been made to it since. The entrances to the wings are from doors under the portico which leads to a lobby, and ascending a staircase to the left you find yourself in the exhibition rooms, where many pictures painted in oil colours by some of the best artists of former days are deposited. Here a man fond of seeing the fine arts will derive much pleasure; the rooms are very capacious and the pictures are very well arranged; benches are also placed in the rooms for the

comfort of the visitors, and it is always thronged by the people. A catalogue of all the particulars is to be had at the place in which the subject, as well as the names of each individual painting are arranged in regular order.

In the western wing of the building is the Royal Academy of Art, where a certain number of young artists study their profession, they are taught and their works are examined by an eminent man called the President, appointed by the government; it was established at the Somerset House, 1768, for the purpose of encouraging English artists, and is now removed to this building.

The productions of these academicians are annually exhibited to the public, commencing from the first week in May, and terminating in July.

The pictures here exhibited are all new, as those which have been once exhibited are not allowed to be there again. There are also a large number of miniature portraits, most exquisitely finished and pleasing to the eye. The disposition of rooms is the same as in the "National Gallery," and in a room on the ground floor are several fine specimens of sculpture.

It is considered a great honor by the artists or sculptors, whose productions are considered worthy of exhibiting at this place, in consequence of which they are excited to competition by which the art receives considerable attention by those who practise it.

In the sculpture room we had the pleasure of seeing the bust of our worthy friend Sir Charles Forbes, executed by Sir Francis Chantrey, who is said to be the best modern sculptor, and we can bear testimony as to its faithfulness.

The statue of Sir Charles which is to be erected by the natives at Bombay, will, we were informed, be executed from the bust which was there placed to test its accuracy of representation, and we congratulate our countrymen, that should it be a true copy of the bust, they will have the very picture of Sir Charles. There were a great many busts and statues of distinguished men in the room, the workmanship of which we very much admired.

There is also in Pall Mall, "the British Institution," the Gallery of a society of noblemen and gentlemen encouragers of the Fine Arts, where some very good paintings by British artists are to be seen, at the payment of one shilling each.

There are a great many other exhibitions in London, but we were satisfied with viewing the first three establishments.

It is to be lamented that there is no taste about this excellent art among our countrymen, but in England it is considered a great accomplishment; ladies almost generally learn to draw and sketch in pencil and in oil and water colours, and it is really a great source of amusement, and their leisure hours are devoted to such occupations, which would have otherwise appeared tedious,

besides how pleasant it must be for them to take a sketch of a place they have once been to, to imitate nature and beautiful scenery, landscapes, flowers, &c.; we hope in conclusion, that our countrymen will evince a disposition to adopt all such accomplishments, as we have described the English to possess, and which we cannot too strongly recommend.

Miss Linwood's exhibition of needle work in Leicester Square, is a most extraordinary production of human ingenuity, or rather application, it is no less than an exhibition of sixty-four pictures from the largest to the smallest size, containing likenesses of man, animal, birds, landscape, sea views, &c., all worked with the needle and coloured woollen threads upon coarse linen fabric, by this lady's own hands.

They are tastefully arranged in three rooms, two of which are one hundred feet in length, and are so well executed that they cannot be discovered from real paintings at a short distance; the last picture she finished about seven years ago, since which she has given up working with them in consequence of imperfection in eye sight.

At the two ends of the second large room are two artificial caves and pictures of a lion and a tiger are placed in it, which so exactly resemble life, that we actually took them to have been stuffed and placed there for show. In the third room there is a likeness of Christ, for which we were informed she was offered £3000. We admired

her perseverance very much, it certainly does great credit to her. The admission here is one shilling, and catalogue sixpence.

In Leicester Square also there is Burford's Panorama, where we saw a representation of St. Jean de Acre, and the bombardment of it by the British fleet; we saw many ships firing shots, and the steamers throwing shells into the fort. The scene we here beheld was awful, we observed some of the Egyptian troops lying here and there killed, and wounded, while others were busy in firing at the ships. The blowing up of the powder magazine, which was supposed to have taken place by one of the shells from the steamers finding its way into it, and which killed nearly 3000 Egyptians, it was a terrible sight as we saw hands, legs, heads, &c., of these unfortunate beings flung into the air. The town of Acre also presented a galling and heart-rending spectacle, it was a mass of ruin and every house was shattered to pieces.

We noticed the Egyptians as fine and athletic men, but not disciplined, because there was great confusion and disorder. The panorama was very well painted, particularly the ships and the sea: we were very much pleased with it. They vary the subjects frequently, and it is a far better mode of representing a place than in a picture, as from being on a large scale it admits of minute delineation of objects. The price of admission is one shilling.

CHAPTER XVII.

PUBLIC BUILDINGS, &c.

ST. PAUL'S CATHEDRAL.—We should have previously mentioned St. Paul's Cathedral, there has been three edifices upon the same spot burned down, the last was in 1666. The present was built from designs by Sir Christopher Wren, and the first stone was laid in 1675 it is the principal ornament of London and stands between Cheapside and Ludgate Hill close to the new Post office. It is built of Portland stone and has a magnificent dome one hundred and forty-five feet in diameter, there are two turrets two hundred and twenty-two feet high in one of which are the bells, and in the other the clock, upon the top of the building are statues of some of the saints of the christian church, St. James, St. Peter, and others; the dome or cupola is most magnificent, the following are the principal dimensions:—whole length of the church and porch 500 feet; breadth within the doors of the porticoes 250; breadth of the west front with the turrets 180; breadth of the

west front without the turrets 110 ; outward diameter of the dome 145 ; inward diameter of the same 108 ; height from the ground without to the top of the cross 340 ; height to the top of the highest statues on the front 135 ; height of the lantern from the cupola to the ball 50 ; diameter of the ball 6 ; height of the cross with its ornaments below 6 ; circumference of the building 2292.

The best place to get a good view of the dome is from under the portico of the Post Office in St. Martin's le grand, the best place inside to view the paintings and the interior of the dome is from the Whispering Gallery ; here if the door is shut it resembles thunder, and a low whisper breathed against the wall can be most distinctly heard on the opposite side of this immense circle by placing your ear against the wall.

In the south turret is the clock, it is wound up daily, and the outward dial (eighteen feet ten inches in diameter) is regulated by a smaller one within-side. The length of the minute hand is eight feet and its weight seventy-five pounds. The length of the hour hand is five feet five inches and its weight forty-four pounds. The length of the hour figures is two feet two and half inches. The diameter of the great bell is about ten feet and its weight is about eighty-five hundred weight or nine thousand five hundred and twenty pounds. In the direction of the wind its sound may be

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and the country around it, is very beautiful. Three persons, two males and one female, have, at different periods within the last few years, thrown themselves off from the top of the Monument, and of course killed themselves by the fall. Upon three sides of the pedestal, at the bottom, there are carved figures, or inscriptions, relative to the great fire it was built to commemorate. The Monument, as well as St. Paul's, forms a very prominent part in the feature of London, view it where you may.

THE THAMES TUNNEL.—We paid a visit to a most extraordinary operation which is going on at Rotherhithe, which is nothing less than to make a tunnel under the bed of the river Thames, instead of a bridge, to allow carriages, horses, cattle, and foot passengers to pass from the Kentish to the Essex side of the river. To any persons except Englishmen the work would have presented insurmountable difficulties, and would never have been attempted; but in 1802, a Cornish miner having been selected for the purpose, operations were commenced three hundred and thirty feet from the Thames, on the Rotherhithe side. Two or three different engineers were engaged and the affair nearly abandoned, until, in 1809, when it was quite given up.

Some few years afterwards a celebrated engineer, Mr. Brunel, the same person who contrived the block machinery at Portsmouth, and the saw-

mills at Chatham, undertook to carry it on, and it was proceeded with by means of an ingenious shield that was moved forward with the workmen upon it as fast as the brickwork arch was completed; but having exhausted all the subscribed capital public subscriptions were solicited, and in the early part of 1824 a large sum was raised, sufficient to enable them to proceed with the excavation.

A powerful steam engine, to clear out the springs of water, was erected, and drains were sunk. In 1827 the river broke through the top into the tunnel, but within a month clay was thrown over the top, and all the water pumped out. Several other similar casualties befel them, and at length application was made to parliament for assistance; and before the expiration of this present year, 1841, the Thames Tunnel will be opened to the public, as they have now (March, 1841) got over all their difficulties, and have only to sink a shaft, and to make the approaches on the Wapping side of the river. The dimensions of the Tunnel will be:—length, thirteen hundred feet; width, thirty-five feet; height, twenty feet; clear width of each archway, including footpath, about fourteen feet; thickness of earth between the crown of the Tunnel and bed of the river, about fifteen feet. This will stand forth as one of the most extraordinary productions ever effected

by man, and a proud monument of British talent and enterprize.

THE ADMIRALTY OFFICE is situated near Charing Cross, between the Treasury and the Horse Guards; and all the transactions of the Royal Navy, the appointments of the dock yards and naval officers, as well as sending out ships in time of war, and the entire management of the navy is here carried on under the authority of a first lord and six other personages; some of whom, though not ennobled, yet from the virtue of their office are called Lords of the Admiralty.

The front recedes from the street, and there are two wings in connection with it by which a small quadrangular yard is formed. The building is not very handsome, but the interior is capacious and convenient to contain the offices for secretaries, clerks, and other branches of the department. The side wings are appropriated to the residence of the Lords of the Admiralty and the Secretaries, and which are very large and commodious.

The first lord is always a minister of the crown, and is either a member of the House of Commons or a peer, by which he has a right to sit in the House of Lords.

SOMERSET HOUSE stands on the north bank of the Thames, close to the Waterloo Bridge. The old building was erected by the Duke of

Somerset, who was for some years protector of the throne of England. The present noble edifice was erected by the government in the year 1776, for the accommodation of several public offices, on the plan of Sir William Chambers. The front consists of nine arches, and the entrance to it from the Strand is through three open arches. In going through the entrance the building presents a complete square, and we find ourselves in an extensive paved court yard, in the middle of which stands a colossal statue of King George the Third. The appearance of the building from this place is very imposing and grand, and shows the wealth of England. It is quite worthy of the mighty city of London, and may be ranked the first of all the public buildings.

Within this are the offices of the Surveyor of the Navy, Stamps and Taxes, Navy Pay Office, Audit Pay Office, the Poor Law Commissioners' Office, &c. &c. It will be seen that a large government business is carried on in this truly splendid building. The present surveyor of the navy is Sir William Symonds, successor to Sir Robert Seppings, and who has made important changes in the construction of ships, and the elliptic stern, which is now generally adopted in the navy. All the ships in the dock-yards are built upon the plan of the surveyor. There are, connected with this department, a great many clerks, draughtsmen, and

other officials; but the object most worthy of observation is the Model Room, to which admission may be had by applying to the surveyor, or his assistant.

We were very kindly permitted by Sir William to go there at any time, and we have often spent our leisure hours in the Model Room. There are two large rooms, containing beautiful and correct models of all the ships and many steamers that have been built upon his plan; two of which, "The Queen" and the "The Vanguard," are very exquisitely finished.

There are sectional models of different ships, showing the manner of combining and fastening together different parts of ships. Boats of all descriptions, and of a great many variety of forms, are to be seen here. The method of different modes of rigging ships, models of different sorts of made masts and yards, models of anchors, cables, and all sorts of iron works that are necessary in building and equipping a ship of war; and gun carriages of a variety of construction are deposited here in glass cases. Paddle wheels of every invention, with machines for various purposes, such as windlasses, capstans, &c. &c. are got up with the greatest accuracy. There are also very complete models of the block machinery at Portsmouth, made by Mr. Maudesley the engineer, and which are said to have cost two thousand pounds.

These are working models, and have been exhibited at the Polytechnic Institution by the application of steam.

All the things that will interest a naval architect, or illustrate any branch of ship-building, are to be found here. Some very good specimens of petrified wood, and specimens with foliage of all sorts of timber from the four quarters of the globe, are systematically arranged, which is extremely useful and instructive to one who is fond of botanical pursuits.

The whole of these are valued at about a hundred thousand pounds, and additions are made almost every day to this valuable and scientific collection, and an extension of rooms will be necessary in a short time. We must here state that it has been principally done by Sir William Symonds, who, on being appointed to the surveyorship, made many augmentations to the original collection, and caused it to be systematically arranged. It is now considered to be the finest Model Room in the world.

Before quitting this subject, we must be allowed to offer our sincere thanks to the talented surveyor, Sir William Symonds, and his excellent and kind-hearted assistant, John Edye, Esq., for the kindness and attention we have received at their hands, and the valuable advice they gave us as to the best mode of obtaining information in our profession.

THE TOWER OF LONDON.—The Tower of London is upon the bank of the Thames, on the eminence called the Tower Hill; it has a broad piece of water round it, and a drawbridge, by which you enter it.

The most ancient part is said to have been built eight hundred years ago. Within these walls persons called traitors, or those who endeavoured to promote rebellion, were kept in prison; and upon Tower Hill very many noblemen and gentlemen were in ancient times beheaded for treason. The Governor of the Tower is always a man of some importance, and the present governor is the Duke of Wellington.

The Horse Armoury in the Tower is well worth inspection, and all the former Kings and Queens of England are here arranged in the regular chronological order, on horseback. The representations of some of these are in the very armours which they wore; and we were here very forcibly put in mind of, once our *own country*, *Persia*, where this iron clothing was made use of; but alas! we have no remains of them, all we know is from historical works, and here we were capable of forming a distinct idea of what armour was. Some of them were very beautifully inlaid with gold, and the room where the equestrian figures are deposited is one hundred and thirty feet long and thirty feet wide, and the figures are about twenty in number.

The walls and ceilings of this room are very beautifully decorated with a great many devices formed principally with old implements of wars.

Queen Elizabeth's Armoury is in the White Tower, and the walls of this building are seventeen feet six inches in substance. Here we saw a great many instruments of war, some of them of the most torturing and cruel nature.

In another building is what is called the Train of Artillery, which is nearly three hundred and fifty feet, and a great many arms are deposited here in large chests. In a portion, which is cut off by a partition from the whole length of the room, are a great many guns and cannons of brass and iron, and some of them are very elaborately cast. From this room you ascend a fine staircase, which leads to a noble room three hundred and forty-five feet in length. We were very much struck with the appearance of this repository of arms; and the arrangement is so complete that it is difficult to give a description of it: for here are one hundred and fifty thousand arms, all newly flinted and ready for immediate service; and this enormous quantity is so well disposed that every one of them can be very easily got at. The walls and the ceiling of this room are very handsomely decorated with devices of old arms, such as cutlasses, swords, pistols, &c., representing stars, crowns, and many other pretty groups. The perspective of the room, from one end to

the other, is also very beautiful, and we were quite repaid for our trouble in going to see the Tower.

There is one part of the Tower to which the public are admitted at the payment of one shilling: where the regalia, consisting of the crown and the other various jewels that are and have been used for coronations and other state occasions in England are kept.

The crown made for her Majesty's coronation is also here, and a beautiful salt-cellar which is used on the royal table at the day of the coronation: it is a model of the tower, and is an excellent piece of workmanship. The whole of the jewellery in this room is valued at three million pounds. The admission to the Horse Armoury is one shilling, and proper persons are kept purposely to conduct the visitors all round, and acquaint them with the particulars of all that is shown them.

We cannot conclude our journal without speaking of that most useful and important institution, called the Bank of England, which is not however as many persons imagine a bank belonging to the government, it is the property of such parties as are the owners of bank stock, as it is called. Originally when it was first established by royal charter, 27th July, 1694, parties who were the then proprietors, deposited certain sums of money and received an acknowledgement for every £100.

which acknowledgement is transferable and sold in the public stock or money-market, and the persons who hold a certain number of these securities are eligible to become Directors or Managers of the Bank, and all persons who hold any of this sort of property, are entitled annually to vote for persons who are qualified to fill the before named offices which are as follows :—there is a governor, deputy-governor, and twenty-four directors. They give employment to several hundreds of persons, including cashiers, clerks, and porters. The bank is an immense pile of buildings in Threadneedle Street, and is nearly opposite to the Mansion House, at the bottom of Cheapside, and facing the spot where the new Royal Exchange is building for the meeting together of merchants for the transaction of their daily business. The exterior walls of the Bank measure three hundred and sixty-five feet on the southern side ; four hundred and forty feet on the western side ; four hundred and ten feet on the northern side ; and two hundred and forty-five feet on the eastern side. The charter was granted to the Bank of England, in consequence of the first proprietors lending £1,200,000. to the government. The charter of the Bank of England prohibits them from dealing in any goods or merchandise, but they may deal in bills of exchange, bullion, foreign gold, silver coin, &c., and may lend money on pawns or pledges, and sell

all those which should not be redeemed within three months after the time agreed upon. Within the walls of the Bank, are nine open courts, and a spacious rotunda, which is a lofty apartment fifty-seven feet in diameter terminating in a dome. There is an armoury, a printing office, a library, besides apartments for the chief officers of the Institution, and spacious offices for the clerks in the different departments. At the Bank the interest is paid upon the national government debt which are called the stocks. It is a magnificent building and the immense quantity of money that is received and paid here daily would exceed belief.

THE GENERAL POST OFFICE is one of the largest public edifices now existing in the city of London; it is situated near where Cheapside and Newgate Street unite, and there is more interesting business carried on within its walls than in any other building in the world. It is amusing to think of the diversity of matter that must be contained in the hundreds of thousands of letters which pass through here every week, and now they are considerably increased, as within the last year it has been so arranged that a letter not exceeding in weight half an ounce, may be sent to any part of the United Kingdom for one penny, if paid before hand, or for two-pence, if not paid for until delivered. This is one of the greatest gifts that a government ever bestowed upon the people;

persons can now write to all their friends and relatives without feeling the heavy expense of communication, and we make no doubt that there will soon be arrangements made, that letters will be able to be prepaid in India, as well as in England, that persons in India may correspond with their friends in England, without taxing them with the expense of all the postage out and home,

The office of the Inland department, is a hall 85 ft. 6 in. in length, by 48 ft. 6 in. in breadth, but including the office for paid letters, it would be 101 ft. It is an institution doing credit to such a country as England.

CHAPTER XVIII.

RESIDENCE AT EGHAM AND VISITS TO WINDSOR AND FROGMORE LODGE.

SHORTLY after our settling at Egham, we became acquainted with a gentleman of the name of Barras, whose son was a midshipman in the Buckinghamshire, who on one Sunday in November, was kind enough to take us to the Terrace at Windsor, in order to see Her Majesty promenading in the gardens. We left our house at two in the afternoon, in his own carriage, and drove to the Castle, which at first sight appeared to us an immense pile of building, and the appearance was so imposing, that we could but gaze with wonder and surprise upon this truly magnificent palace, and we were lost in amazement how such a stupendous work was achieved, and how much time, labour, and money, it must have taken.

The Terrace is very large, extending the whole breadth of the Castle, and is very tastefully laid out in flower gardens and wide gravel walks. It is

open to the public, and is always thronged on Sundays when the Queen resides there.

The Castle stands on an eminence, by which it commands a beautiful view several miles round. On our going to the Terrace we saw a great number of men, women, and children, in their best clothes, walking about and enjoying the fresh breeze. In the middle of the garden, a beautiful fountain is playing constantly, and there are seats provided for the royal band. At about half past four the band (which was the best we had ever seen) began to play, which announced the Queen's approach.

In a very few minutes we saw Her Majesty coming on the Terrace, and every body ranged themselves on both sides of the road to pay their respects and have a peep at their youthful sovereign. She was plainly dressed, and we had the honour and gratification of seeing of her.

She passed by close where we stood, and had in attendance upon her, Lord Melbourne, and Lord Falkland; there were many others who were not pointed out to us. We were of course steadfastly and earnestly gazing upon the interesting face of that young lady, who holds so high and important a post as the Queen of Great Britain, and we were asking ourselves, whether she would not, in all probability have been happier, had her lot been to have passed through life as Princess Victoria, without being called upon to fill the high

responsible position she now does. When attracted by seeing us in our costume, she turned her head and looked upon us, we made our salaams (an Indian bow), but we received an answer in that look, an answer to what had been passing in our minds.

We saw in an instant that she was fitted by nature for, and intended to be, a Queen; we could perceive a native nobility and expression about her, which induced us to believe that she could, although meek and amiable, be *firm and decisive*, and that whether whigs or tories were the ministers of the day, that she would still be the Queen and have her own will and judge for herself.

We imagined no man or set of men would be permitted by her to dictate a line of conduct, but that knowing and feeling that she lived in the hearts and affections of her people, that she would endeavour to temper justice with mercy, and we thought that if no unforeseen event (which God forbid) arose to dim the lustre of her reign, that the period of her sway in Britain, would be quoted as the golden age.

Shortly after she had passed us, one of the attendants came to inquire who we were and what country we came from, which we informed him, but he returned again to say that Her Majesty was pleased to know our names, and as we knew the difficulty an Englishman has to pronounce our names, we gave our cards to him which he

handed to Lord Melbourne, and no doubt were read to Her Majesty, who did us the honour upon reaching the end of the Terrace again to look upon us, and what to her was the novelty, our costume.

We felt highly honoured in thus being noticed by our gracious sovereign, the greatest in the world, and we were highly delighted with the loyalty which the English people present, evinced towards Her Majesty, as we observed every individual that was on the Terrace take off their hats, and pay proper respect and homage to her. We returned to Egham in the evening, and thanked our friend for his trouble and attention.

Egham is situated about eighteen miles from London, and four miles from Windsor ; it is a quiet and retired village, and the town extends about a mile in length on the Great Western road, which is a considerable thoroughfare to the western and southern parts of England, and stage coaches to Reading, Windsor, Exeter, Taunton, and a great many other places pass through Egham ; we were told that before railroads were introduced, more than eighty coaches used to pass daily through this village.

There are few shops, but sufficient to supply the wants of the place ; a church for the people to perform their devotion in, and a circulating library with a reading room is also established for the lovers of literature ; we cannot indeed speak

of it but with pleasure, it shows that the people of England have as much facility to acquire knowledge in a small village, as well as in a town of considerable magnitude.

Egham also boasts of a most useful and charitable institution, founded by a Mr. Strode, about the year 1704, it consists of almshouses for six poor men, and the same number of women to each of whom are allotted two rooms, with an allowance of six shillings a week, and an annual supply of coals and articles of clothing sufficient (if taken care of) to carry them through the year. In addition to which, there is a charity school where about a hundred boys of the inhabitants of Egham are instructed in reading, writing, and arithmetic, as far as decimal fractions. Adjoining to the school room, is a fine building as a residence for the master, and the present master is our worthy instructor, the Rev. George Hopkins; we have frequently been to see the school, and were much gratified to see the progress the boys were making under his able superintendence, and the discipline which he has introduced, and we think that these children must in after life, become industrious and sober men, in consequence of having had the advantage of education.

The establishment is under the management of the Cooper's Company, who are the trustees of the charity fund; many improvements were made

while we resided at Egham, six new almshouses were built and a handsome gateway erected in the front, enclosed with iron railings.

We consider this institution a great blessing to the people of Egham, and especially to the poor people, who could not spare any money to educate their children.

The locality of Egham is very interesting, on account of the historical facts connected with it. The famous spot, called the Runimead, is situated on the north side of Egham, on the banks of the river Thames ; and this was the place where King John signed the great charter called the Magna Charta, in the year 1215.

It appears that the King, by his tyranny, and by encroaching upon the liberties of the people, drove them to rebellion, and a great many of his courtiers took up arms and demanded a reparation of the injuries he had done them, and a confirmation of their former rights and privileges, to which the King, much against his will consented, and Runimead was the spot chosen for the people and the King to meet, and here they had this charter signed, which was the greatest era in the history of England, as it was the foundation of British liberty. A facsimile of the original charter is deposited in the British Museum. The meadow contains about one hundred and sixty acres of ground, and serves as a race course.

The races take place every year, on the last

Tuesday in August, and the two following days, when some good horses are to be seen.

Many noblemen and gentlemen from the neighbourhood come to see them, and for whose accommodation booths are erected; and some members of the Royal Family also honor the races with their presence, which, however, was not the case when we were there.

Staines is an old and much larger town than Egham, situated on the Middlesex side of the Thames, and about a mile and a half eastward of Egham.

Staines Bridge is constructed of stone, and is a beautiful structure. It consists of many arches, three only of which are passable for barges.

The celebrated Cooper's Hill stands on the west side of Egham, and commands one of the finest views, including the town of Windsor and the castle, and the height affords a varied and romantic prospect to the eye.

St. Ann's Hill is also a very noted place, and Mrs. Fox, the wife of the noted statesman, resides there in a beautiful mansion. We once went to see it, and were amply repaid with the romantic scenery we beheld from the top of it; the height is considerable, and a carriage can be driven to the summit, through a steep road which leads to it.

In the month of August, accompanied by our tutor, Mr. Hopkins, who procured admission for us, we went to see Frogmore Lodge, the then

residence of Her Royal Highness the Princess Augusta, sister to the late King, and aunt to her present Majesty, Queen Victoria. It is situated on the high road which leads from London to Windsor. The house has a neat appearance, with a handsome portico, and a semicircular drive in the front of it. On entering the front door we ascended a flight of beautiful steps railed with brass, and richly carpeted. We were very kindly received by Miss Wright, a lady of her Royal Highness' household, and a friend to our tutor. She conducted us to the drawing room, which was very beautifully fitted up; the sofas and chairs were covered with silk, and we saw many beautiful paintings, principally portraits, of the Royal Family, in this room.

The adjoining room was the Princess' sitting room, and where she was then present. We were desired by Miss Wright to wait where we were till she had procured permission from her Royal Highness to view the house and the gardens. In a few minutes, to our great surprise, we found her coming out of the room with her Royal Highness, who, she said, had expressed a desire to see us. We were then introduced to her, and had the high honor of conversing with her about five minutes. She particularly inquired after our healths, and seemed much interested with our costume; she then very kindly gave us the permission to see the house and the gardens. We

were then conducted through a great many rooms, all of which had some objects of attraction, such as paintings, musical instruments, old-fashioned furniture, and other things, all costly and elegant.

The library was very good; it was a room about sixty feet in length and half as wide, and the walls were covered with valuable books from top to bottom.

We then walked in the gardens, a large piece of ground, which is laid out in lawns and gravel walks with shady trees on both sides of them; and some antique vase, or a pillar of any ruins, placed here and there to give effect.

There is also a piece of water, and a part of the ground is laid out in flower gardens.

Here we would wish to remark that we were disappointed with the gardens in England. We have seen some which our English friends would call beautiful, but to us they appear more like a wood; because they are principally laid out in lawns, flower gardens, and trees which bear no fruit.

The arrangement is not like the gardens in Bombay: there we have fruit trees standing in the middle at certain distances, and vegetables growing between them; then the narrow gravel walks having plants of rose, jessamine, and many other scented flowers, on both sides, give a pretty and varied effect, and the trees in blossom or fruit, and the flowers of various colours, in bloom,

heighten the beauty. To walk here in the lull and quiet of a beautiful moonlight night, the gentle and cool breeze and the fragrance of the rose or jasmine, or the lilly of the valley is extremely refreshing, and is the most pleasant enjoyment we have. In vain have we longed for such a night in England, and we have been reminded very often, when thinking upon this point, of our dear native land.

In England on the contrary flowers and fruits are grown in separate pieces of ground, the latter very often of one particular sort, so that when the season is over, they present a dull appearance, which is not the case in India, in consequence of the arrangements we have just mentioned.

The fruit in this country is not so good as in India, there is not the powerful sun to bring it to the same perfection, and of all we liked the pears, greengages, raspberries and strawberries best; the English however by their industry contrive to grow foreign fruits such as grapes, pine-apples, oranges, &c. in hot-houses, which are nothing more than light buildings glazed all round, in which a fire is kept in winter to preserve a uniform temperature, but the grapes are not so good as those imported from Spain and Portugal. Very fine oranges are also imported from these countries in large quantities, they are sold very cheap and are very sweet and wholesome; in the months of February and March they are to be got

in perfection, and, in addition to those sold by the fruiterers, poor people sell them almost in every corner of the streets in London. Flowers in England are very good but not scented, nor is there the profusion of that delightful flower the rose, as in India; we left Frogmore highly delighted with the honour we had of conversing with the illustrious Princess and with the distinction she conferred upon us.

We have since learned with much regret the death of her Royal Highness, by which the neighbourhood is deprived of one of the most benevolent personages, as she was extremely kind-hearted and charitable, and many poor people were subsisting upon her bounty; it may not be amiss here for us to inform our countrymen that this princess was never married, she died at the age of seventy-two, but she did not look quite so old when we saw her; she was plainly dressed in blue silk, without any profusion of jewels or other valuable things.

We then proceeded to Virginia Water, which is an artificial lake, said to be the largest of the kind in the kingdom. It is about two miles from Egham and is perfectly secluded from the high road. The entrance to it is from an Inn called the Wheatsheaf, where admission to it is easily obtained; a road or rather a foot-path through an intricate but a romantic wood leads to it, and the boundary of the water is so judiciously con-

cealed from the sight that we imagine it a large river.

The neighbourhood is very fine, the verdant walks, the variegated surface of the ground, and the woodland scenery agreeably relieve the eye. On the water is kept a royal yacht called the "Royal Adelaide" completely masted, rigged, and in readiness to set sail at the shortest notice. She was constructed for King William the Fourth by the present talented surveyor, Sir William Symonds, and was built and launched on the spot by our worthy friend John Fincham, Esq. who had the honor of dining with the King on the evening of the launch, and has received a handsome plate as a token of His late Majesty's approbation of the ability and skill with which he completed the vessel, we are told that it is the model of the Pique thirty-six gun Frigate. The Queen or any other member of the Royal Family, now and then take a sail in this vessel, on the lake ; she is very conveniently and richly fitted up for the reception of the illustrious personages.

Here is also the long boat of the Victory, Lord Nelson's Flag Ship in the Battle of Trafalgar, and there are other boats kept in readiness for fishing and the amusement of the Royal Family. On one side of the water is a wooden building called the Fishing Temple, its appearance is altogether very fanciful and is more like Chinese architecture than any thing else. The inside is fitted up as a dining

and a sitting room and was the favourite resort of George the Fourth, who was a great patron to this beautiful place. He caused an artificial ruin to be placed here which has a pretty effect, but it does not excite that solemn reflection in our minds as a *real ruin*, which stands upon the site where it has for years withstood and defied the elements in all its former glory, and we now behold it withered and decayed by the unrelenting hands of Time.

There is also a beautiful artificial cascade and the walks about it are very verdant. It is an excellent place for the Lovers of Solitude, as here nothing is heard but the noise of the waterfall, and the chirping of the birds. We were very much pleased with our visit to this place, and returned home in the evening, well repaid for the trouble we had taken.

Before we left Egham we had been to Windsor Castle and we only saw the public apartments, as a permission is required from the Lord Chamberlain to view the private apartments. We have subsequently been fortunate enough to see them through the kindness of our friend T. Baldock, Esq., who procured the required order for us, and we have given a description of the whole in another part of this work.

We quitted Egham on the 24th of September, 1839, being exactly a twelvemonth since we took up our abode here, and we can with much pleasure speak of this quiet village.

The inhabitants are though few yet very respectable and honest, and we know from our having seen other places, that Egham, from its retired situation, is free from many of the vices and corruptions to which large towns and sea-ports are subject.

We forgot to mention that we had our tutor's brother, Mr. Joseph Hopkins, living with us, during the time we were under his superintendence. He is an excellent penman, and by following his directions we improved our handwriting very much, and by constantly conversing with him we made a more rapid progress in the English language than we otherwise might have done, in addition to which he was a most agreeable companion.

CHAPTER XIX.

CHATHAM DOCK YARD.

WE paid a visit to the Queen's Dock Yard at Chatham, accompanied by our kind friend John Seppings, Esq., who introduced us to Mr. Stone, the then master shipwright, and Messrs. Moore and Laire, the assistant master shipwrights. We went from London Bridge by a steam boat to Gravesend for two shillings each, and from Gravesend to Chatham in a very easy van as they called it, for two shillings each. The ride from London to Chatham by the coach is very beautiful; the view from Shooters' Hill and from Dartford Hill, is very fine, and the view from Northfleet to Gravesend of the Thames, with the never failing supply of ships and vessels sailing thereon, is most pleasing. In all England we are told there is not a prettier ride than from Gravesend to Chatham. Upon the top of Stroud Hill, the view of the towns of Stroud, Rochester, Chatham, and Brompton, with the river Medway, the Barracks, the Naval Hospital, and the Dock Yard and Gun

Wharf is very good, added to which, that fine old building Rochester Castle, the Cathedral, and the Bridge, and Baths, and the pretty Church of Friendsbury, on the left hand with St. Margaret's, Rochester, on the right, and towering above all the ramparts and fortifications of Chatham, the Citadel ; all these combined, present as beautiful a sight of its sort, as is to be met with. We have subsequently rode over this ground always with pleasure and often. When we are in Bombay, will our thoughts return to those who are dwelling within the view that is to be seen from Stroud Hill.

Nearly all the roads out of London, after you have got out of the smoke of London, present very fine views, and then the roads are so good, that with the good horses and carriages you almost appear to fly over them, so swiftly and easily do you pass along. We were very much pleased with our visit, and we afterwards resided and studied our profession of shipbuilding there, under the able instruction of John Fincham, Esq., who became the master shipwright upon the death of Mr. Stone. We have, therefore, thought it proper to procure as correct an account as we could of that large naval establishment.

This celebrated Dock Yard which has been considerably enlarged, and received many additional improvements within these few years, occupies an extensive area on the south east bank of

the river Medway. Including the Ordnance wharf, it measures about a mile in length, and is surrounded by a high wall, and defended on the land side by strong fortifications, principally of modern origin. The entrance is by a spacious gateway, over which are the royal arms, flanked by embattled towers. The houses of the captain, superintendant, and of the principal officers, are large and handsome buildings, and the various offices for managing the different departments of the yard, especially those which were erected in 1811, for the principal clerks and officers, are extremely neat and commodious, and well become the opulence of the English nation, and the importance of the navy. In the storehouses, one of which is 660 ft. in length, are deposited prodigious quantities of sails, rigging, hemp, pitch, tar, resin, and all other necessities for the equipment and building of ships. The coils of cordage, and of chain cables, the heaps of blocks, and innumerable articles requisite for the service, are arranged in exact order, so that in times of emergency, they can all be taken out without confusion, and every department being under the superintendence of proper officers, the business is so much accelerated that even a first rate man of war, has often been equipped for sea in a few weeks. The principal mast house is nearly 240 ft. long, and 120 ft. wide; some of the masts deposited here are $3\frac{1}{2}$ ft. in diameter, and 40 yards in length; the timbers

to form the masts, are constantly kept floating in two spacious basins constructed for that purpose. The new rope house is 1110 ft. long, and nearly 50 ft. wide, in which cables of all dimensions are twisted, some of which are 120 fathom long, and 22 inches in circumference; the labour of making these cables is partly executed by machines.

The sail loft is 70 yards long, and the other workshops are of proportional extent. The wet docks are four in number, all of which are sufficiently capacious for first rates, two of which are roofed over. There is also a stone dock upon a much larger scale than any of the others. There also are six slips on which new ships are constantly built, all of which have roofs over them that cost about £3000. each. The smith's shop (where anchors of all sizes, some of which weigh nearly five tons, are constantly made) contains about forty forges; the fires are blown by a blast of air from a wheel turned swiftly in an adjoining building. The dock yard chapel built for the accommodation of the officers, artificers, and shipwrights and their families, was completed in 1811, and is reported to have cost upwards of £9000. It is a neat plain structure of brick, and the interior is extremely light, elegant, and pleasing.

The Royal dock yards are all of them similarly supplied with an abundance of valuable timber and stores, but as we had constant daily opportunities of visiting Chatham yard, we are more

convenient with that than any other of the yards; and we could not but observe with great pleasure, the disposition that has been shewn by the Admiralty of late years to get from every quarter of the world timber of all description, to test which is the best adapted for ship building purposes. They have had oak timber from Italy, from Istria and from Styria for timbers of ships, and from Denmark and Meckel oak plank for bottom, this last is imported from three to six inches thick, is free from knots and is of hard texture and very durable: a great deal of the Italian oak is large and nicely formed for ship's timbers, and the Istrian oak for building steam vessels, the prettiest small compass timber that was ever seen and appears to be of good texture. There are also several sorts of Larch, Italian, Polish and North American or Hackmetak. A merchant ship of near five hundred tons came to Chatham twice, whilst we were there, built in Prussia of Polish Larch, by the person who was her captain, she had been fourteen years employed since she was built, had never had any repairs done to her, and was quite as sound and good as when built. The Polish Larch is coarse looking timber, but the knots are well collared, and it appears well adapted for ship building. The Italian Larch is of a finer grain, freer from knots, but we know nothing of its durability. The Hackmetak Larch was small and straight and did not bear a compa-

rison with Italian or Polish Larch. There was also a large quantity of African timber, by some misnamed Teak, it is a hard reddish wood, straight or compass, it appears to be very durable, but with great loss upon its conversion, and it is unpleasant timber to have to do with, for sometimes without exhibiting any symptoms of decay on the outside, there will upon sawing it be found hollow places within the log, large enough for a man to lie down in. It is however useful for bitts, for beams, and loamings of hatchways. It is also useful for steps of ladders on board ships, for pillars, &c. There is also another timber called pitch Pine from Savannah, when it is good it is very durable, but it is full of a hot resinous substance, that as soon as the tree is past its prime appears, if not cut down then, to eat up and destroy all the fabric. It is of uncertain quality, and not a pleasant timber to convert for that reason. They are also using a very curious timber from New Zealand, called Cowdie, the trees are very large, some of them being sixty to seventy feet long, and from twenty to twenty-four inches in diameter and holding seventeen inches at the top end. It has no knots and is capital for topmasts, and for cutting in planks for steam vessels, as it can be worked in long shifts. After all we have seen we think there is nothing like Teak, and if the British Government do not build ships in India, we wonder they do not import Indian Teak. It

is *almost everlasting*, and although the first cost appears high it would be cheaper to use it at any price that it might cost.

A fourteen horse power engine drives the machine at the ropery, for winding each thread of the yarn as it is spun and passed through hot tar, as well as four capstans for forming the strands, that is a number of yarns pass through a tube, and are connected to a machine called "an equaliser," which gives the proper twist and compression to the said strands, preparatory to closing three of them together into one rope.

In a building close to the ropery is what is called "the lead mill," where leaden pipes as well as sheet lead is manufactured by machinery, driven by a beautiful engine of twenty horse power. For carrying on the process, lead pipes are first cast in pieces of two or three feet in length, having an iron rod equal to the diameter of the bore passing through them, they are then removed to what is called "drawing triblet," which consists of a strong cast iron frame fitted with appropriate machinery, which carries the pipes backwards and forwards; square pieces of iron, (called dies), having holes of graduated size, are fixed to this triblet, through which the pipes successively pass till they arrive at the required thickness, which governs the length of the pipes, varying from fourteen to twenty-two feet.

Sheet lead is manufactured by first casting a

large thick piece of lead, and passing it between two iron rollers, which exert an enormous pressure against it, and expand it every way at each revolution ; the distance between these rollers diminishes gradually and by this means the lead is framed into a sheet of any required size.

In addition to this work, the same engine propels the machinery in an adjoining part of the building, where paint is manufactured ; dry white lead is first bruised under heavy stone rollers, and afterwards sifted ; it is then put into the mill with a sufficient quantity of oil to be mixed to a certain consistency, ready for the grinding stones.

The advantage of substituting steam power for manual labour is here admirably illustrated ; it will be seen that an engine of twenty horse power does as much work as would require six or seven times as much men to perform.

At the north-east extremity of the Dock-yard stands a new work, called the Saw Mills, projected and executed by that excellent and talented engineer, Mr. Brunel, who has done more for the mechanical arts than any man living, and who is the constructor of the Thames Tunnel and the Block Machinery at Portsmouth Dock Yard. The saw mills, as their name imports, are for the purpose of converting timber into planks or boards for the various purposes of ship-building, and the general service of the yard.

The building is erected on an eminence, thirty-five feet above the level of the lowest part of the

yard, and the operation of conversion is performed by the agency of steam. The mill is on an extensive scale, and the mechanism may be reduced to three principles :—

First,—That the saw is drawn up and down, as long as is necessary, by a motion communicated to the wheel. Second,—That the piece of timber to be cut is advanced by an uniform motion to receive the stroke of the saw, and not the saw to follow the wood. Third,—That when the saw has cut through the whole length of the timber, the whole machine stops of itself, and remains immoveable; lest, having no obstacle to surmount, the moving power should turn the wheel with too great a velocity, and injure the machinery.

The room in which the saws are worked is ninety feet square, and covered with a light roof of wood and wrought iron, which contributes much to the internal beauty of the place. In this room there are eight saw frames and three circular saw benches, besides the capstans for supplying the frames with the wood, by drawing the pieces from the outside of the mill to the side of the saws.

These frames are entirely independent of each other, and are capable of carrying from one to twenty-four saws; the number of saws put into one frame will depend on the number of cuts that are to be made, and may be arranged at different distances, according to the thickness required.

The supplying the saws with timber may be

regulated at pleasure according to the nature of the wood or the number of cuts, though the saws always make the same number of strokes, viz. eighty in a minute. The drags which convey the timber to the saws, besides their progressive, have a retrograde, motion, and roll backwards when the timber is cut. There are likewise various ingenious contrivances for holding the timber while it is sawn, and also for following the natural bend of the wood when requisite.

Two of the saw frames are appropriated to deal slitting, an operation which is performed with amazing rapidity and the greatest precision. We have seen at one frame two deals ten feet in length, slit into four boards in the short space of ten minutes; and the two frames have produced in six days (working only seven hours and a quarter each day) thirty-four thousand superficial feet of timber.

The whole of this machinery, together with the three circular saws, are propelled by an engine of thirty-six horse power; wedges, and other light work for joiners, are cut by the circular saws. In an adjoining room are lathes for turning brass and iron work for capstans, windlasses, treenails, and all kinds of metal and wood required for the service.

Some very extensive waterworks are connected with this steam engine; iron pipes are laid at different parts of the yard, and on them, at certain distances, are fixed cocks, which, when required,

three streams of water above the highest buildings. From these pipes all the offices and houses in the yard are supplied with water; and there are also pipes at the river side to supply the ships in ordinary with this necessary article of cleanliness.

Necessity is the mother of invention; the saying is well exemplified in the instance of the saw-mills. We have stated that the building stands on an eminence, which made it very laborious and expensive for logs of timber to be brought to the saw mills from other parts of the yard for conversion. This defect engrossed the mind of the ingenious constructor of the mills, and led him to invent one of the simplest and prettiest pieces of mechanism we ever saw, and which has completely remedied the imperfection.

The ground on the north side of the mill is appropriated to the stowage of timber. Rafts are floated from the river by means of a canal, which runs open about two hundred and fifty feet, and, on entering the rising ground, becomes a tunnel about three hundred and thirty feet in length, and opens into an elliptical basin which is in length ninety feet; breadth, seventy-two; and depth, forty-four.

The operation of raising the timber from this basin is worthy of observation, and the steady, though quick motion, with which it ascends, is truly astonishing. We have witnessed a balk, sixty feet long and sixteen inches square, raised

to the top of the standard, sixty feet, in the short space of twenty seconds! merely by the waste or condensed water being allowed to run into an iron vessel, to outweigh the timber. It is then farther lifted by two cranes, given motion to by a vibrating rod connected with the steam engine, and, when suspended on the said cranes (which are portable, and weigh about nine tons each without the load), the logs are transported to any of the stacks alongside of a railroad eight hundred and twenty-eight feet long, having an inclination of two feet ten inches in every hundred feet; so that its own gravity takes it down, and it is brought back by means of an iron chain winding round a large drum, which is moved by the engine. The speed with which it runs down with the loads is uncertain, but is moved back at the rate of three miles an hour.

There is a tank over each wing of the saw-mill building to receive the water when raised, fifty-seven feet long, thirty-two feet wide, and two feet deep; and they each hold about 22,500 gallons of water.

Besides supplying the yard and the ships with water, this engine has to supply the same to the Royal Marine Barracks, Naval Hospital, and Infantry, or Chatham Barracks; these establishments at least consume from three to four hundred tons of water.

There is also a fifty horse power engine for pumping the docks, which works a pump of four

feet in diameter, which delivers about fifty-five cub. of water per stroke; the strokes are from twelve to fourteen per minute.

In the same building is a twenty horse power engine, as a substitute, should anything happen to the above engine; it has two pumps, one of twenty-eight inches and the other of twenty-two inches, to drain the docks. This engine is also adapted to give motion to a three barrel engine pump for the fresh water, which will produce the same effect as the saw-mill engine.

The fans for blowing the smithy fires are driven also by this engine at the rate of one thousand revolutions per minute; and it drives a large volume of air, through proper passages under ground, to the smith's shops and the quantity is regulated by valves fitted into the tubes. This has been a very great improvement and all the dock yards now have been or are about to be supplied with the blasting machine, the smithy is rendered delightfully cool and pleasant by the constant current of fresh air, which makes it much more healthy for the people to work in.

The mould loft is a very capacious room with a fine even deal floor of three inches in thickness and coated over with black paint; this is the place where moulds for the various component parts of ships are made, and the true size, form and the dimensions of them are delineated for the guidance of the builder, which process is called "laying off;" it requires great nicety and sufficient practice

to lay off a ship on the mould-loft floor, as it is the very foundation from which the ship is built, and the excellency of a design may be entirely lost through neglect in this department.

No one can be called a good practical shipwright, unless he has a thorough knowledge in this branch of the practice of naval architecture, as the economy of material greatly depends on it. We should here observe that great care is taken in the Royal Dock Yard in laying off a ship, and well acquainted persons are intrusted with it. There are two persons at Chatham to delineate the lines and two to make moulds, apprentices are also sent to the loft to be instructed in "laying off," and the whole work is most admirably carried on.

The Frigate *Mæander* of 46 guns, which had been standing on the slip 16 years, was ordered by the Admiralty to be launched, and the 5th of May was the day our friend John Fincham, Esq. appointed for it. We were very glad in having thus had the opportunity of witnessing the English mode of fitting the launching apparatus. The principal dimensions of the *Mæander* are—

		Ft.	In.
Length on the range of the deck	-	159	0
Do. of the keel for tonnage	-	133	2½
Breadth extreme	- -	41	5
Do. moulded	- -	40	9
Depth in hold	- - -	13	6
Burthen in tons	No 1215	¾	

Before we give an account of the launch, we think it will be interesting to our readers to have a brief description of the principle on which the launching of a ship depends.

It is well known that the first process of building a ship is to lay down the keel on blocks about four or five feet apart, and with an inclination of five-eighths of an inch to a foot, but this is not the general rule, because local circumstances may require a little variation. The keel is the foundation on which frames are erected, which are planked both inside and out to combine the whole into one common mass; to keep the two sides together, and to give security to the whole fabric, beams are thrown across, resting their ends on a longitudinal tie called the shaft pieces, which run all round, and are firmly secured to the sides, the beam ends are bolted through another tie called waterways, which lay on them, and against the sides to which they are secured with iron or copper bolts, thus the bolts for the beam ends pass through the waterway, the beam and shelf, on the lower part of which they are clenched on a ring.

When the keel is in its place the frames are gradually raised, and shores or posts are erected to keep the fabric in its position and to sustain the weight.

Now at the time of launching, the question is, to remove the shores and to find out some means to balance the ship and to sustain her weight, and

that support must be moveable in order to sustain the ship, while in the act of descending downwards, till she is received by the water.

To effect this, therefore, two inclined planes, one on each side are constructed parallel to and at about one-third the distance of the half breadth of the ship from the centre line of the keel, and extend in length from the fore extremity of the ship, to as low down as the ebb tide will permit, in order to support the vessel in her descent.

The surfaces of these planes (technically called sliding-planks) are about two feet below the body of the ship, amidships, and their inclination from about three-quarters of an inch to an inch and a quarter. Their breadth is guided by the size of what are called the bilgeways; these are assemblages of timber connected together from about fifteen inches to two feet square, and in length a little more than two-thirds of the length of the vessel. When the inclined planes are ready, the bilgeways are laid upon them parallel to the keel, and square ribbons are brought outside of them at a very small distance, say, about three quarters of an inch, and firmly secured to the sliding plank.

Now, the space between the upper part of the bilgeways and the bottom of the vessel, is filled up with solid pieces of wood of short length, but as the space considerably exceeds at the extremities, square pieces of timber called poppets are

superintendence of the master shipwright, and so excellent was the arrangement that there was not the slightest confusion, and the launch was exceedingly good, as the vessel glided down the very moment the dog-shores were down.

We here copy a very interesting description of the launch, written by a gentleman at Chatham, in the "Kentish Coronal."

"On Tuesday, May the 5th, at about half-past two, P. M., was launched from Her Majesty's Dock Yard, Chatham, the frigate "Mæander," amid the firing of cannon, the waving of flags, and the shouts of assembled thousands; she left the slip whereon sixteen years since, her strong keel was lain, to which have been added, joint after joint, and plank after plank, rivetted and bound together by immense bolts and bars of metal, until she has become what we now behold her, a thing to wonder at, with an admiration almost amounting to awe.

"Many a stately tree, once the pride of the woodlands, has been cut down, and in the words of 'Barry Cornwall'—

"His arms from the trunk are riven,
 "His body all barked and squared,
 "And he's now like a felon driven,
 "In chains to the strong Dock Yard.

"He's sawn through the middle, and turned,
 "For the ribs of a frigate free,
 "He's caulked, and pitched, and burned,
 "And now he's fit for sea.

" Many a hundred weight of ore has been dug
 " out of the bowels of the harmless earth, smelted
 " and wrought into shape and fitness by oft re-
 " peated blows of ponderous hammers wielded by
 " the brawny armed smiths ; or in the swift re-
 " volving lathe turned, grooved and polished with
 " a celerity, precision, and beauty of finish, that
 " seemed like the work of enchantment. Many
 " a muscular frame has become weary of the
 " labour which was to fit her for encountering
 " ' the battle and the breeze,' toiling day after day
 " and year after year, at what must have appeared
 " an almost interminable task, so vast the bulk
 " and so complicated the structure of this citadel
 " of the deep. At length she is finished, and
 " stands prepared to go forth upon the waters,
 " wanting but the masts and rigging to enable her
 " to fly like a winged creature over the bosom of
 " the ocean, and bear the flag of our country to
 " whatsoever quarter of the globe it may be
 " deemed necessary or expedient. Go mark her
 " giant bulk, so huge yet graceful in its fair pro-
 " portions ; gaze on the massy timber which like
 " the ribs of some vast animal bulge out on either
 " side on her beams of immense girth, her iron
 " stancheons, the planks of goodly oak which
 " form her decks and confess that the mind of
 " man may conceive, and his hands execute works,
 " which would seem the result rather of super-
 " human than merely mortal power. Yet let not

“ this reflection make thee vain glorious, for re-
 “ member there is One far mightier, whose works
 “ are infinitely more wonderful, in the hollow of
 “ whose hand are the waters held ; who piled up
 “ the mountains, and bade the trees of the forest
 “ rear their heads on high, who created the
 “ Behemoth and the Leviathan merely by the
 “ impulse of his will. He spake and it was done.
 “ He who can crush the framework of this noble
 “ frigate, wrench her strong joints asunder, and
 “ scatter her timbers upon the face of the waters,
 “ as easily as the summer zephyr scatters the
 “ thistle-down upon the hills.—But lo ! the signal
 “ is given ; the impediments are removed ; and
 “ slowly and majestically she glides into the
 “ river, the band playing ‘ Rule Britannia,’ and
 “ the spectators shouting with might and main.
 “ ’Tis an anxious moment to all concerned in
 “ getting her afloat, but more especially so, to the
 “ Master Builder, on whom rests the greatest
 “ responsibility : a slight error or deficiency in
 “ the completeness of the arrangements may be
 “ attended with the most serious consequences,
 “ destruction of property, and what is of far more
 “ importance loss of human life. But nothing
 “ occurs to mar the proud satisfaction, with
 “ which he marks the consummation of the labour
 “ of so many years, safely she rides on her sub-
 “ ject element and all cause for anxiety on her
 “ part is at an end. Yet we cannot help thinking

" that he and every one concerned in her erection,
 " who have watched her growing year by year
 " into the fullness of her strength and beauty,
 " must feel deeply interested in her career, yearn-
 " ing towards her with a fondness almost parental.
 " The following lines were the result of our
 " reflection on viewing the above spectacle, and
 " we trust our readers will pardon the —— shall
 " we call it egotism, which prompted their
 " insertion in the Coronal.

" Another mighty instrument for evil or for good,
 " This day with spirit stirring cheers is launched upon the flood,
 " How gracefully she glided down amid the foaming tides,
 " That leapt as though to welcome her and kiss her swelling sides,
 " And over to the farther bank, she moved like a queen,
 " That goeth with a stately pace, her people's ranks between ;
 " She went with music and with shouts, and blazonry so brave,
 " To take possession of her throne upon the subject wave,
 " And calmly now she lieth there upon the river's breast ;
 " Unheeding whether destiny may send her east or west,
 " Unconscious of the many souls she'll bear upon the deep,
 " And dreamless all of rocks and shoals, and waves that madly
 leap.

" How beautiful she looketh now, a stately thing to see,
 " A fabric that we wonder at, how long will it thus be ?
 " Perchance no distant period may see her timbers rent,
 " And scattered here and there, the sport of the vexed element.
 " Thus man when first he goeth forth upon the sea of life
 " Is fair and comely to the view with strength and vigour rife,
 " But soon alas the storms may come, and he before the blast
 " May drive a shattered wreck with scarce a vestige of the past.
 " Oh may this floating citadel—this mighty ship of war
 " Be never used for purposes but such as peaceful are :

" To devastate and to destroy, and make man's labour vain ;
 " Oh never may her thunders wake the echoes of the main."

" An alteration in the concluding stanza has
 " been suggested by a friendly critic, because he
 " infers that a ship of war cannot be applied to
 " other than warlike purposes. The truth of this
 " inference we deny. She may be the means of
 " conveying the man of science to regions of
 " ignorance and barbarism, and thus become a
 " mighty instrument for the spread of civilization
 " and diffusion of that knowledge, by which man's
 " physical nature is elevated, and made capable of
 " rightly appreciating the value of scientific pur-
 " suits. She may be rendered subservient to the
 " uses of commerce, and thus afford a means of
 " enlightenment to the dark places of the earth :
 " and she may merely be a shew of overwhelming
 " power, without once using those engines of de-
 " struction, which the bad passions of mankind
 " have prompted them to invent, awe into quiet-
 " ness many who are stirred by avarice or ambition
 " to become disturbers of the world's peace, and
 " destroyers of their fellow creatures."

After the launch we had the pleasure of spend-
 ing the day at our kind friend Mr. Fincham's
 house, where a splendid collation was served up
 to all the principal officers of the dock yard and
 many of his private friends ; we heard some good
 speaking, the company departed at six P. M. all of
 them highly delighted with the doings of the day.

We see by the Navy Estimates prepared February, 1841, for Parliament to vote the supplies of 1841 and 1842, that the following officers upon salary are required for Chatham Yard :—

	Per Year.
Captain Superintendent - - -	£1000
Master Attendant - - -	480
Assistant Master Attendant -	300
Master Shipwright - - -	650
Two Assistant Master Shipwrights, each	400
Storekeeper - - -	600
Store Receiver - - -	450
Director of Police - - -	250
Surgeon - - -	500
Assistant Surgeon - - -	200
Chaplain - - -	350
Boatswain - - -	200
Two Clerks, first class from £300. to £450. per year. Gross amount -	825
Five Clerks, second class from £150. to £300. per year. Gross amount	1422
Nine Clerks, third class from £80. to £150. per year. Gross amount -	1323
Master Smith - - -	260
“ of Saw Mills - - -	250
“ Sailmaker - - -	250
“ Rigger - - -	250
“ Ropemaker - - -	250
Six Foremen of the Yard - - -	250
Timber Converter - - -	250

	Per Year.
Assistant Timber Converter, first	- 180
“ “ “ second	- 160
Conductor of Lead Mills	- 200
Foreman of Painters	- 200
“ of Ropemakers	- 200
Acting do. do.	- 200
Foreman of Smiths	- 150
Fifteen Inspectors, each	- 100
Three Layers in Rope Yard, each	- 100
Leading man of Storehouse, first	- 120
“ “ “ second	- 100

The following are the sums proposed to be voted for the Year 1841, for wages to Artificers, Shipwrights, and Labourers, for the several Yards named :—

Deptford	- - - £ 5800
Woolwich	- - - 50,500
Do. Steam Engine Manufactory	20,000
Chatham	- - - 81,200
Sheerness	- - - 53,000
Portsmouth	- - - 126,000
Plymouth	- - - 126,000
Pembroke	- - - 39,000
Deal	- - - 500

and the following expenses are to be incurred for wages, clothing, &c., of the police in the Dock Yards :—

Woolwich	- - - £2224
Chatham	- - - 2974

	Per Year.
Sheerness - - - - -	2244
Portsmouth - - - - -	3179
Plymouth - - - - -	3974
Pembroke - - - - -	1379
Deptford - - - - -	2431
Deal - - - - -	91

When we look at the large sums thus required for building and keeping up a Navy, and when we know the immense sums that such a large army as that kept up by England must cost, we are not surprised that such heavy taxes are required upon every thing that is introduced into England.

A friend of ours gave us the following description of taxation, supposed to have been written by an eminent statesman, now a law lord :—

“ The effects of war are taxes upon every article
 “ which enters into the mouth, or covers the back,
 “ or is placed under the foot ; taxes upon every
 “ thing which it is pleasant to see, hear, feel, smell,
 “ or taste ; taxes upon warmth, light and loco-
 “ motion ; taxes on every thing on earth, and the
 “ waters under the earth ; on every thing that
 “ comes from abroad, or is grown at home ; taxes
 “ on the raw material ; taxes on every fresh value
 “ that is added to it by the industry of man ;
 “ taxes on the very source which pampers man’s
 “ appetite, and the drug that restores him to
 “ health ; on the ermine which decorates the
 “ judge, and the rope which hangs the criminal ;

“ at the poor man’s salt, and the rich man’s spice ;
 “ at the brass nails of the coffin, and the ribbons
 “ of the bride : at bed or at board, couchant or
 “ levant we must pay : the schoolboy whips his
 “ nose taxed up : the beardless youth manages his
 “ taxed horse, with a taxed bridle, upon a taxed
 “ road, and the dying Englishman pouring his
 “ medicine which has paid seven per cent., into a
 “ spoon that has paid fifteen per cent., flings
 “ himself back on his chintz bed which has paid
 “ twenty-two per cent., makes his will on an eight
 “ pence stamp, and expires in the arms of an
 “ apothecary, who has paid a license of £100. for
 “ the privilege of putting him to death. His
 “ whole property is then immediately taxed from
 “ two to ten per cent. Besides, the probate,
 “ large fees are demanded for bringing him in the
 “ chancel, his virtues are handed down to pos-
 “ terity on taxed marble, and he is then gathered
 “ to his fathers to be taxed no more.”

We have frequently made enquiries as to any
 article that is not taxed, and we do not know any
 thing that is in general use which has not a tax,
 with the exception of gas lights ; candles, and oil,
 pay duties, but gas is used every where and pays
 nothing.

The preparations for launching the London, was
 the same as the *Mæander*, but being a much larger
 ship, the dimensions of all parts of the launching
 apparatus was proportionably large, and the whole

was superintended by our friend Samuel Read, Esq. The judicious management of our worthy instructor John Fincham, Esq., in launching the steamer on the same day, attracted thousands of persons to witness such an interesting scene; the affair indeed was so grand and so much were we delighted, that we feel we could not by our own words, convey more exactly our feelings upon and give an account of that, to us a novel, and to every body so highly interesting a spectacle, we therefore copy a description of these launches as appeared in the Maidstone Gazette, (editor, Mr. Whittings,) which was published nine miles from Chatham, and within ten hours after the launches, and came out the next morning, copies of which papers were procured for us by a kind friend of ours at Chatham; the account it gives is so very minute and faithful, that it does a great credit to the writer, and we think that we should only spoil it did we add one single word of our own to it, in consequence of which we quote exactly as it appeared in that journal.

“ **GRAND SHIP LAUNCH AT CHATHAM.**—
 “ Public notice having been given that the steamer
 “ ‘ Polyphemus’ and the ship of war ‘ London’
 “ would be launched yesterday, a large concourse
 “ of people assembled to witness the imposing
 “ ceremony. The weather in the morning was
 “ gloomy and unpromising, and continued squally
 “ throughout the day, with occasional showers.
 “ Fortunately, however, the amount of rain which

“ fell before the launch, was so inconsiderable as
 “ to prove of little inconvenience to the vast
 “ multitude that assembled.

“ The gates of this dock-yard were not opened
 “ to the public till twelve o'clock, although they
 “ were literally besieged for admission at an early
 “ hour. The few who were, however, fortunate
 “ enough to obtain admission earlier, found ample
 “ subjects for meditation and admiration in this
 “ important national establishment. In addition
 “ to the ships to be launched, there are now on
 “ the stocks, or in dock, the vessels:—

“ Calypso . . 20 Guns.	Commenced Dec. 1837
“ Active. . . 36	— — 1836
“ Cumberland 70	— May 1836
“ The Mars . . 30	— Jan. 1840
“ Also the Formidable, preparing for commission.	

“ All these vessels, in different stages of com-
 “ pleteness, and exhibiting some of the most stu-
 “ pendous results of human ingenuity that can
 “ probably be witnessed on the earth, afforded
 “ the liveliest scope for wonder and delight to
 “ thousands, who had never before witnessed the
 “ progress of naval architecture; whilst the inge-
 “ nious mechanical arrangements of this great
 “ national factory elicited equal admiration.

“ The ‘ Polyphemus,’ a beautiful war steamer of
 “ eight hundred tons burthen, was first launched.
 “ Half-past twelve was the hour named for launch-

"ing this beautiful vessel; but the strong wind
 "having somewhat delayed the rising of the tide,
 "she was not launched till one o'clock. Long
 "before that hour a numerous crowd of respecta-
 "bly dressed persons, with a full proportion of
 "that female elegance and beauty for which Kent
 "is said to be famed, had occupied every point
 "from which a view of the operations could be
 "gained. At this moment, and subsequently,
 "we noticed amongst the company Sir C. Adam,
 "Sir W. Symonds, Admiral Digby, Sir J. Mar-
 "shall, Admiral Fleming, Sir J. Hill, Sir T.
 "Baker, Captain Blundreth, Captain Baker, Dr.
 "Beattie, Captain Clavell, &c. &c., most of
 "whom were accompanied by their families.
 "Indeed, from the vast number of equipages and
 "persons of consideration present, it must be
 "assumed that nearly all the leading families for
 "miles round attended.

"J. Fincham, Esq., master builder of the dock-
 "yard, having seen that every thing was in readi-
 "ness for launching the 'Polyphemus,' Miss
 "Flora Clavell, on whom the honor of christening
 "devolved, prepared to take her part in the cere-
 "mony. The old mode of christening a vessel
 "previous to launching, was that of throwing a
 "bottle of wine at the bow of the vessel, with, of
 "course, sufficient strength to smash it and bathe
 "the vessel with the generous juice. The unfe-
 "minine operation of 'throwing,' and the diffi-

" culty of finding a lady who could make certain
 " of hitting a seventy-four, however, suggested
 " that the advancement of science, which had
 " done so much for building, should do a little
 " for christening. The present mode is that of
 " slinging a bottle of port horizontally, in a line
 " attached to the stem of the vessel, removing
 " the bottle to a sufficient distance and breaking
 " it against the keel, its own gravity being almost
 " sufficient to effect that object. Making allow-
 " ance for the trepidation natural to christening
 " an object of such magnitude, the fair baptizer
 " executed her task *à merveille*. Scarcely had
 " she pronounced the words, 'The Polyphemus,
 " 'may she do honour to her builder,' when the
 " air was rent with the heartiest huzzas, the dog-
 " shores were knocked away, and by the mere
 " force of her own gravity, the ship 'walked the
 " 'waters like a thing of life,' a fearful instrument
 " of good or ill, as human reason and benevolence,
 " or human passion and prejudice, may chance to
 " prevail.

" The company then proceeded to view the
 " launching of the 'London.' The public were
 " admitted on board this really splendid vessel
 " till within a short period of her launching. In
 " the opinion of several naval authorities who
 " inspected her, the finishings (even to the cabin
 " tables), are the most complete of any vessel
 " ever turned out of hand. The vast dimensions

"and accommodations, [the immense quantity of
 " *materiel* used in her construction, the power of
 " her armament, being the largest fighting vessel
 " of two decks ever built, the magnitude of her
 " weight, and the length of time which had been
 " consumed in welding together (if we may use the
 " term) the many thousand loads of British oak of
 " which she is composed, all combined to strike
 " the beholder with admiration, amounting to awe,
 " at the stupendous and immeasurable power of
 " the intelligence which had designed and pro-
 " duced her.

"The 'London' is called a line of battle ship of
 " 92 guns, on two decks. The following are her
 " principal dimensions, and some other particulars
 " concerning her :—

	feet	in.
" Extreme length - - - - -	242	6
" Length on the gun deck (lower fighting do.) - - -	205	7
" Length of keel for tonnage - - - - -	170	6
" Ditto on the blocks - - - - -	192	0
" Breadth, extreme - - - - -	54	2
" Ditto for tonnage - - - - -	53	6
" Ditto, moulded - - - - -	52	8
" Depth from taffrail to keel - - - - -	57	6
" Ditto from figure head to keel - - - - -	50	9
" Ditto in hold - - - - -	23	0

Burthen in tons, 2602.

GUNS.					
	No.	in.	Pr.	cwt.	length
" Gun Deck -	6	of 8	68	65	9 0
	26	6	32	56	9 6
" Upper Deck -	4	8	68	65	9 0
	30	6	32	56	9 6
" Qr. deck and forecastle	26	6	32	41	8 0

" Total weight of metal (or shot)	-	3304 lbs.
" Broadside	-	1652 lbs.
" Total weight of guns	-	242 tons 12 cwt.

NUMBER AND WEIGHT OF ANCHORS FOR SEA.

" 4 of 95 cwt. each	}	Total Weight, tons cwt.	}	Value £ 1054
" 1 25				
" 1 12				
" 1 7				

MASTS.

" Bow Sprit	-	Length 76 ft. 3 in.	Diameter 40 in.
" Foremast	-	113	7 ... 37
" Main Mast	-	121	9 ... 40
" Mizen Mast	-	77	8 ... 26

" The preparations for the public accommodation
 " were excellent, as might have been anticipated
 " from the assiduity and attention of the kind-heart-
 " ed and liberal master shipwright, Mr. Fincham,
 " under whose direction everything was arranged.
 " Each side of the immense slip was occupied by a
 " magnificent booth, offering covered seats, rising
 " from the front, for nearly 3,000 persons, who
 " were admitted by ticket. These booths were
 " handsomely decorated with flags and colors, and
 " afforded complete protection from the inclemen-
 " cies of our ever-varying climate. A spacious
 " covered platform was erected at the head of the
 " vessel, for the accommodation of the nobility and
 " the official authorities connected with the
 " business of the day. On different sides of the
 " vessel were stationed the excellent bands of the
 " Royal Marines, the dock-yard, and the 96th foot,
 " who during the day very considerably contri-
 " buted to the general enjoyment and hilarity,

" by their spirited performance of some of the
 " most soul-stirring of our national and naval airs.
 " On this platform were also placed the choristers
 " of Rochester cathedral, assisted by about twenty
 " female and fifty male singers, who executed the
 " pieces selected (considering the disadvantages of
 " the immense space that required filling and the
 " dense crowd around them) in a very creditable
 " manner. The end of one of the booths nearest
 " the river was reserved for the Lords of the Ad-
 " miralty, and splendidly decorated with flags.

" One of the most pleasing features of the day's
 " proceedings was the appearance of the poet
 " Campbell on the platform. At the suggestion of
 " Mr. Baldock, he was greeted with the appropri-
 " ate air 'the Campbells are coming' from the
 " Marine band, and the general heartfelt expres-
 " sions of regard which hailed his appearance
 " must have been peculiarly gratifying to this
 " highly gifted bard. It was truly pleasant to see
 " the voluntary and ready homage which was
 " paid by rank, wealth, and power to the supre-
 " macy of mind. Numerous were the introduc-
 " tions of his admirers to the poet, through his
 " friends, Dr. Beattie and Mr. Baldock.

" For a few minutes before the launch the *coup*
 " *d'œil* presented from the platform was certainly
 " the most magnificent scene imaginable. Twen-
 " ty thousand persons are said by the police to
 " have entered the dock-yard within two hours,

“ and including the parties on both sides of the
 “ river, very nearly 30,000 persons must have
 “ been present. The galaxy of beauty and
 “ elegance that filled the booths on either side of
 “ the vessel, clad in all the hues of the rainbow ;
 “ the profusion of union-jacks and national em-
 “ blems which decorated the vessel and the
 “ booths ; the gay and varied uniforms of the
 “ numerous military and naval officers ; the sin-
 “ gular costume of some natives of the East ;
 (alluding to ourselves) “ the steamers lying mid-
 “ river covered with people, and ornamented with
 “ flags ; the crowds and groups of people congre-
 “ gated and scattered over the green hills and
 “ marshes in the distance ; the intense interest in
 “ the proceedings evinced by those who had
 “ climbed up the timbers which supported the
 “ roof of the slip, and had even mounted on the
 “ roof itself of the neighbouring slip ; the sun-
 “ burnt hardy-looking row of smiling faces be-
 “ longing to Jack tars and Jack tars’ sweethearts,
 “ which were ranged along the bulwarks of the
 “ stem, and filled the foremost port-holes of the
 “ gigantic object of interest,—these and numerous
 “ other striking peculiarities of the scene induced
 “ us to regret, that such a spirit-stirring and truly
 “ national exhibition as a ship launch had never
 “ to our knowledge formed a subject for the ge-
 “ nius of either of our eminent painters.

“ At this moment Miss Clavell (sister to Miss

“ Flora Clavell who had named the Polyphemus)
 “ dashed the bottle against the coppered keel, and
 “ exclaimed ‘Success to the London, and may
 “ she prove a terror to our enemies.’ Loud and
 “ hearty cheers succeeded, the bands played ‘ God
 “ save the Queen,’ after which the choir sung

“ God save the Queen ! Long live the Queen !

“ May her reign be prosperous !

“ Victoria reigns ! may her reign be prosperous !

“ The worthy master shipwright then took his
 “ station on the platform, and explained to the men
 “ below the signal on which they were to knock
 “ away the dog-shores. The signal is given. Three
 “ or four blows are heard, and a moment of awful
 “ suspense succeeds. During fourteen years, heads
 “ that are now low have anticipated the moment
 “ when by her own innate power she would require
 “ but the cutting of a thread to enable her to slide
 “ off the comparatively slight frame on which she
 “ is so delicately balanced. For fourteen years have
 “ ‘ thews and sinews’ that are now crumbling into
 “ dust been engaged in fashioning the gnarled oak
 “ into the graceful and irresistible form she now
 “ wears. The triumph, or failure of human intellect
 “ is at hand. Thirty thousand breasts are swelling
 “ with expectation. The sound of the last blow
 “ from the hammer has scarcely died away. For an
 “ instant, which seems an hour, the stillness of the

"grave prevails. She moves. A streak of electric
 "fire follows the progress of her cradle along the
 "slips, handkerchiefs and hats are waved in wild
 "exultation; a shout, such as is heard from
 "Britons alone, peals along the vaulted roof, is
 "taken up by the hundreds on board the vessels
 "in the river, and re-echoed from the myriads on
 "the opposite shore. In the next instant the
 "magnificent vessel is breasting and cleaving the
 "mighty waters with the gracefulness of a swan.
 "So sweetly and smoothly does she glide into the
 "waves, that you can scarcely believe that she
 "has not grown in them, and find it almost im-
 "possible to suppose that she has for years rested
 "motionless in the mighty chasm now gaping at
 "your feet. A flood of light is let into the
 "inclosure by her removal—it is reflected from
 "thousands of sparkling eyes and happy faces,
 "who now for the first time discover that the
 "powerful brass band has been playing 'Hearts
 "of oak' ever since she first began to move.
 "Campbell's vigorous and highly appropriate
 "ballad 'Ye Mariners of England' is sung by the
 "choir, with keener enthusiasm inspired by the
 "presence of the poet.

"Britannia needs no bulwarks,
 "No towers along the steep,
 "Her march is o'er the mountain waves,
 "Her home is on the deep,

“ were truths, never more forcibly felt, or heartily responded to, than on this occasion. ‘ Rule Britannia’ is played, and an original version of ‘ God save the Queen’ is sung, and the immense multitude, after seeing Scott, the American diver, leap from the mast-head of a brig, depart to their homes with the most perfect decorum.

“ A *déjeuner* was afterwards given by J. Fincham, Esq. (whose excellent arrangements may be said to have been perfect) to about eighty of the most considerable guests, and heads of departments, and is said to have been in many respects the most *distingué* entertainment that has been witnessed in Chatham for some years.

“ The conduct of the police was admirable. They stopped above thirty men of known bad repute at the dock-yard gates. Not a single theft or accident was heard of, and we are glad to be able to state that the body of the police (with Lieut. Hubbard their superintendent) received the thanks of the Lords of the Admiralty for their good conduct.

“ We ought not to close this report without acknowledging the polite attention and civility offered to the representatives of the public press by the master shipwright and Mr. Baldock, with whose general character for urbanity such attentions are perfectly consistent.

“ The inhabitants of Rochester and Chatham describe the attendance at this launch as being more numerous than that at any former one. The complement of the London is 800 men and officers.”

To us these launches were of great professional importance. The London had been designed by Sir Robert Seppings, formerly surveyor of the navy, father of our friend John Seppings, Esq. of Calcutta; a great portion of her had been built by our kind friend John Fincham, Esq., master shipwright: and we had every day for some months watched the progress of her completion; we therefore felt deeply interested upon this occasion.

Early in the morning of the 28th September, we were in the Dock-yard to see the London set up, preparatory to her blocks being split from under her for launching. We were conversing with our friend Mr. Baldock, his daughters, and Mr. and Mrs. Flight, of Highbury Terrace, near London, when a messenger in the master-attendant's office, who had formerly been a sailor in the British Navy, and who has the blessings of having been well educated, presented to Mr. Baldock the following piece of poetry, of his own composing, on the launch that was to take place that day:—

Ye artizans, ye men of Kent,
Your ancestors were long content
To charge the watery element
With barques by tempests undone,

But you, more fortunate than they,
 You flourish in a happier day,
 And nobler energies display,
 In building of the London.

A finer, firmer ship than she,
 To grace the line, or stem the sea,
 By art constructed could not be ;
 I mean to say, the London.

With stern sublime, and ample side,
 Where white and black in shade divide
 The parts of her who is the pride
 Of Chatham, Kent, and London.

Well might our great metropolis
 Be proud of such a ship as this,
 To represent the wealth that is
 In mighty matchless London.

Her guns, in number ninety-two,
 Well served by tars expert and true,
 Shall send her charges through and through
 The ship that braves the London,

Apart from each and every care,
 Spectators, now yourselves prepare
 To see the sights you came to share,
 The launching of the London.

And while she is gliding down the ways
 -Rend, rend the air with loud huzzas,
 In Clavell's and in Fincham's praise,
 For launching well the London.

After the launch was over, we were invited by
 Mr. Fincham to spend the day at his house, and

we had the high pleasure to meet at his hospitable table the greatest number of persons that we had ever seen assembled in a private residence in England. There were all the resident officers, and their families, of Chatham and Sheerness Dock-yards, several of the foremen of the yard, and some of the clerks. Amongst the guests was T. Campbell, Esq., a very celebrated English poet; Montgomery, a writer, and Dr. Beattie, also a celebrated author. Our good friend, John Seppings, Esq., surveyor of shipping at Calcutta, was also there, and — Sketky, Esq., a very celebrated painter of marine views, consisting of ships, yachts, &c. We heard some good speaking, and some very nice songs; whilst upon the table, of every thing, whether of game, chickens, pastry, tarts, cakes, jellies, and all choice fruits, there was a great abundance. Wines of a great many sorts, champagne, hock, claret, &c. were freely partaken of, and it was a most delightful day.

We should be wanting in gratitude did we conclude the subject of Chatham Dock-yard, which we are proud to call *our professional school*, without returning our heartfelt and most sincere thanks to Captain Clavell, the worthy superintendent, and his assistant, Thomas Vinall, Esq., for the kindness they evinced towards us. We are at a loss how to express our gratitude to our worthy and talented instructor, John Fincham, Esq., who, besides the instructions we received

from him in our profession, evinced an uniform kind disposition, and his amiable family were not backward in welcoming us in every way. We are no less indebted to the assistant master shipwrights and all the foremen of the yard, together with their families, for the attention we experienced from them; all of whom we here beg to assure that they have not bestowed favors upon ungrateful objects, as we shall through life bear them in lively recollection, and look back with pleasure on the pleasant and happy hours we have spent with them.

CHAPTER XX.

CHATHAM, ROCHESTER, AND MAIDSTONE.

CHATHAM is very populous, but very irregularly and ill-built; it consists principally of one long street, extending along the banks of the Medway; Chatham, Rochester and Stroud being one long continued street of above two miles in length. There are very good shops, at which nearly every thing can be procured nearly as cheap as in London.

In Chatham there is an excellent institution founded by Sir John Hawkins,—almshouses for poor decayed mariners and shipwrights, these were built in 1592, and twelve poor old sailors, or shipwrights, have a good house, a quantity of coals, and a few shillings each per week to make the latter end of their lives comfortable.

In Rochester there is a valuable charity founded by Richard Watts, Esq., on the 22d of August, 1579, and a stone over the door of the house where his charity is daily dispensed, will tell its own story. On it are these words: "Richard

“Watta, Esq., by his will dated 22d of August, 1579, founded this charity for six poor travellers, who, not being rogues or proctors, may receive gratis, for one night, lodging, entertainment, and fourpence each.” How rogues and proctors came to be thus named together is not exactly known. But the common report is, that having once been taken suddenly ill, and having employed a proctor or lawyer to make his will, upon his recovery he looked at the will made in his illness, and found that the proctor had left all the money to himself; and to perpetuate the knowledge of this act of villany, he thus left his bequest. There are also some very nice almshouses on the new road, Rochester, called St. Catherine’s Hospital, where several elderly females, who have known better times, have a small house, with sufficient weekly income to keep them. These are very good things. These are such things as do honour to Englishmen. And we are told that there is scarcely a large town of ancient origin but what has some of these benevolent institutions.

There is a very small theatre at Rochester for the amusement of the inhabitants, and in Chatham a Mechanic’s Institution, and it is matter of surprise that in this populous place, the neighbourhood of which is surrounded by many wealthy individuals, there is not a public building of any pretension of architectural beauty, or a room to

accommodate two hundred people, nor is the theatre worth noticing.

Brompton is a very populous village, situated on an eminence above the dock-yard, and inhabited principally by the artizans employed in the dock-yard. Extensive fortifications are erected, which comprehend within their range this village and Chatham Church. The barracks are very large, and in addition to the one called Marine or Chatham barracks, there are two others for bringing up soldiers for foreign service, and many hundreds of troops were sent to India during our residence at Chatham.

The country round Chatham is very fine, and the walks are very good, particularly the one to the neat and quiet village of Gillingham, which in summer is a most pleasant ramble. Chatham races take place every year on the place called the Lines, where the soldiers are reviewed; it is a large plot of ground, and very appropriate for the purpose; the races commence on the first week in September, and continue three successive days; several booths are erected, and many stalls are set up for the sale of refreshments, and a stand for the accommodation of the people, who, on the payment of a trifle, can have comfortable and commanding seats for viewing the races.

Whilst we were residing at Chatham we were often told that hops and apples were the chief productions of the county of Kent, and we were

persuaded to go and see them growing. And on Sunday, the 20th September, 1840, accompanied by our friends Mr. Baldock and Dorabjee Muncherjee, and by one of our domestics, we proceeded in an open barouche with a pair of horses, in the direction of Maidstone, the county town. We passed through Rochester, and from thence by a road leading through a wood, and where, in consequence of the approach of the English autumn, the several sorts of trees were all of them clothed with leaves of different colours, and beautiful they were to behold. The trees were not large, as they are cut down every ten or twelve years to make hop-poles and fire-wood ; but there was every variety of hue among the leaves, from the deep red to the lively green. We shall not soon forget the beauty of that valley on the right hand. We kept ascending an eminence for four miles, when we came to a magnificent prospect from the top of what is called Blue Bell Hill. And here we were most forcibly reminded of our own ever dear Bombay. For upon the top of the hill Mr. Baldock pointed out to us a bungalow, or country-house, erected by an intimate friend and distant relative of his, the late Walter Prentis, Esq., for the express purpose of receiving and entertaining his numerous friends there. And as some of our happiest hours in India are spent in bungalows, this, and the extensive and varied view, and *the then strong gleam of sunshine*, glad-

dened our hearts, and our parents, wife, child, and relations, all became present to us in our minds. We descended a very steep hill, and we had pointed out to us a mound of stones which are said to have been there ever since the year 455, and that a great battle was then fought there between the *Britons* and the *Saxons*, in which their leaders were killed. *Catigern* is supposed to be buried here. What renders these stones more curious is, that there are no stones of a similar description within a great many miles of the spot, and consequently they must have been brought here. And how they managed to remove them and to set them up here with the rude machines they had in those days is truly astonishing, as they are very heavy, weighing each upward of eight tons, and about eight feet high. The view from the top of Blue Bell Hill, all the way to Kitscottie house, is very pleasing; there was not, it is true, any of the grand features of picturesque scenery. No mountains, no lakes, or no cataracts. There are, however, a long high range of hills which bound the view; and in the bottom, the river Medway, which takes an immense number of circuits, and which adds much to the beauty of the view. Corn fields, green meadows, orchards, hop gardens, here were all blended together, and formed a varied scenery.

We here quitted the high road to Maidstone,

and descended a narrow and almost precipitous hill to the village of Aylesford. Here there is a bridge over the Medway. The parish church is upon an eminence just above the village, and the quiet, home view from this spot, would make a lovely picture at high water; for, at low tide, when the water has receded, this village loses much of its beauty. In this quiet church lay the remains of several of the family of Lord Grey and of the Colepeppers; they were some centuries since active partakers in the wars of their days, and their armour and weapons are some of them hanging now over their tombs. What a contrast! here in the quiet retirement of a peaceful little nook lay those whose lances were stained with blood. Here awaiting their final judgment lay the mighty men of arms, who in their life times led on to slaughter and to devastation. The village of Aylesford is on the north bank of the Medway, and close to it is the Friary, the country residence of the Earl of Aylesford; it is situated close to the Medway, and from it is to be seen one of the prettiest pictures that can be imagined, embracing the picturesque bridge, the old fashioned church, and the village,—all surrounded and shut in by beautiful green verdure, form a scene of quiet that would make one think if peace and happiness are to be found in the world, that *here*, if sought for, it is to be

found. On the opposite side of the bridge is Preston Hall, the abode of Charles Milner, Esq., an elegant building situated in a park of great beauty. We proceeded through Mill Hall, and East Malling, through a tract of fertile country to Watlingbury, and had some refreshment at the King's Head Inn at that place. We walked out to look at the hops, as they were growing in great abundance in this spot, and which are indeed beautiful to behold. The hop plant is cultivated at a heavy annual expense. Poles, from 10 to 20 feet long are placed at angles all over the gardens, and the plant, which is a climber, grows to the top of them, twining round, and when at the top, stretching out its bine and catching hold of the other poles. The hop itself, at a short distance, very much resembles grapes; but upon approaching closely, you find that they are composed of minute leaves, which upon being rubbed between the fingers, give out a gummy matter, which has a perfume, and are of a bitter taste. The leaf of the hop plant is very elegant in its form; and no one can picture the perfect beauty of a hop garden. It must be seen to be duly appreciated. Hops, when dried, are subject to a duty of 18*s.* 8*d.* per hundred weight of 112 lbs., and pay a large sum to the revenue; but they are very uncertain in their produce. In the year 1803, they paid for duty £433,054. 11*s.*; in

1805, only £57,158. 17s. 7½d.; and in 1808, £437,697. 7s. 3d.; in 1825, only £42,290. 10s. 4½d.; and in 1839, £357,456. 16s. 8d.

It was the time for gathering the hops when we were at Watlingbury, and it affords for a few weeks employment for some thousands of men, women, and children. The hops are carefully picked, one by one, and dropped in a bin, which is a cloth formed into a pit, which will hold about twenty bushels, by crossing long poles. And the hop-pole being laid across the top thereof, the hops are gathered, then measured, as the pickers are paid by the bushel, and then taken to the kiln called an oast-house, where they are dried over a coke fire upon horse-hair cloths, and then pressed down by men stamping them into coarse cloth bags, which usually weigh two hundred weight and a half, or into finer cloth, called pockets, weighing one hundred weight and a half, and they are then fit for making beer. They fluctuate very much in price, having been sold for upwards of £20. per hundred weight, and at £2., so that very many persons who speculate in them have been ruined. Hops are used for making the daily drink of Englishmen, called beer. A grain called barley, is placed in water until it sprouts for growing; when it is placed in a kiln the vegetation is stopped, and the grain is roasted; this is called malt, which is bruised in a mill, and water at one hundred and sixty-eight degrees of tem-

pretence is poured over it in the proportion of about fifteen gallons of water to eight or nine gallons of ground malt: this is stirred about violently, which is called washing, and after about an hour, the liquor thus obtained, called sweet wort, is placed in a copper, and to about seven-
 teen gallons, one pound of hops is added, which being boiled for an hour, is then poured out and cooled as quickly as possible; when it is down to about heat, a little yeast (or leaven) is added, which causes it to ferment, and then it is beer. Beer is of several descriptions of strength and colour, according to the proportion of malt, and the different states of roasting to which the malt has been subjected. Brown stout and porter, from high roasted malt, is nearly black. And ales from pale malt are nearly without colour. We saw in Watlington pleasure grounds belonging to Alderman Lucas of London, who has a country residence here, which, from the road, looked very pretty, having several waterfalls in them. We crossed the Medway again from Teston to Farleigh, and here we saw a very pretty waterfall, the waste water of the Medway running over a tumbling bay, which had a pretty effect. Farleigh is celebrated for its hops, and the fruit called apples, and it may well be spoken of. We saw, indeed, here a sight we may perhaps never see again. In one large apple orchard near the church there were immense apple trees, with con-

siderably more apples thereon than leaves, and so weighty was the fruit, that hundreds of wooden supporters were obliged to be kept under the branches to prevent them from breaking down. There are, perhaps, more than a hundred different sorts of apples, some fit to eat when first gathered from the trees, others that will keep good eight or nine months. They are a most valuable fruit; in England they are good to eat as a fruit, and are used in either puddings, pies, or tarts; the juice of them when pressed makes a drink called cider, which is nearly as good as champagne. The apples, when growing, present a very beautiful appearance; they are of varied colours; some of them have rosy cheeks, some yellow, others of every variety of green, whilst others are perfectly brown and rough. We shall not soon forget the pleasure of seeing apples and hops growing. This clearly proves every country has its beauties. France and Portugal boast of their vines, India her plantains, mangos, and palm trees, and England her apples and hops. We should think we passed through a village called Tovil, where there are several large paper manufactories, to Maidstone, and drove to the house of an intimate friend of our companion, Mr. Baldock. His name was Thomas Charles, Esq.; he lived in a very large old-fashioned house, called Chillington Mansion; he is what is called an antiquarian; he shewed us a large collection of very ancient coins,

a quantity of old armour, and curiosities without number; he has also some fine old paintings, and is himself a very good painter; he shewed us scores of his own sketches taken from nature. He was kind enough to allow our servant to prepare tea and coffee for us, and treated us very kindly. We saw among his collection a valuable Indian inlaid cabinet. We walked about Maidstone; it is an old-fashioned, well-built town; it has a bridge over the Medway, and is 36 miles from London; there are several manufactories of paper close by. We walked to see the barracks, which are for horse soldiers designed for India; but we were followed by a dense crowd of persons attracted by our costume, and as our friend knew the governor of the gaol, we went in there to get rid of the pressure; but when we came out, they had increased so very considerably, that we could not see all that our friend wished to shew us. We went through the churchyard, from whence there is a very pretty view, and walked over the bridge to an eminence called Rocky Hill, where there is a spring, that supplies by pipes the town of Maidstone with water. Maidstone is seen to much advantage from the upper part of Rocky Hill. The gaol, and the court-house adjoining, where the prisoners are tried, is most extensive. They are built of Kentish rag-stone, quarried upon the spot, and possess every advantage which prisons can have for keeping prisoners distinct,

with tread wheels for the incorrigible, and the cleanliness of the cells surpasses belief. They must have cost very many thousands of pounds. We were accompanied in our walks all over the town by vast numbers of people. And we should have said, that all the little places through which we passed, poured forth nearly their whole population to gaze upon us in our foreign costume. We took refreshments with Mr. Charles, and although it was dark when we quitted his residence, some scores of people were assembled outside to see us get into our carriage. We were much pleased with our ride through the most beautiful part of Kent, and we think it is very properly named, from the variety of its productions, the "Garden of England."

We now take leave of the county of Kent, but not without conveying our grateful acknowledgments to our valued friend Thomas Baldock, Esq., through whose kind and polite attention we have been enabled to see a great many sights, and have obtained much general information.

CHAPTER XXI.

SHEERNESS DOCK YARD.

DURING our residence at Chatham, we went to inspect this Dock Yard, accompanied by our kind friend Mr. Adams, of Chatham Yard. Sheerness Yard is a proof of what money and science will do in England, as it is built upon a point of land consisting of mud which was once part of the sea, and under the coating of mud are quicksands in which long piles driven for the masonry to rest upon, used often to go down and disappear in the sands. A fort was built to defend the entrance of the Medway and the Thames, and a Dock Yard established at Sheerness, in the reign of Charles the Second. This Dock Yard is well worth inspection; since the year 1815, it has been very considerably enlarged. The area of the yard is 59 acres, and it is surrounded by a wall, excepting that part which faces the water; the length of the west wall is 2093 feet; length of south wall 880 feet; there are three basins within the yard; the largest one (capable of containing several first

rates with their guns, ballast, and stores of every description on board them fit for sea) is 520 feet long, and 300 feet broad, having an entrance of 60 feet, secured by a Caisson, which always keeps the water within of sufficient depth, to prevent the ships grounding. The middle basin is 250 by 200 feet, having an entrance of 49 feet, and the north basin 282 feet 6 inches, by 200 feet six inches, with an entrance of 102 feet. In the south basin there are three dry docks, 248 feet long, 88 feet wide, and 30 feet deep, having entrances 57 feet wide, and which admit of ships being docked and undocked at any time.

And here is also a frigate dock 207 feet long, 75 feet broad, 19 feet 9 inches deep, with an entrance 57 feet wide. Some idea may be formed of the magnitude of the works carried on in altering and enlarging the dock yard, when it is stated that for making the foundation alone, ninety-nine thousand piles were driven. One of the most curious things to be seen in Sheerness Dock Yard, is the very extraordinary model of the yard upon a very large scale. We have mentioned that where Sheerness Yard now stands, the sea used to flow over; we have told that it is constructed upon a muddy ooze which had no firm bottom, having quicksands beneath, and there never were perhaps greater obstacles to be overcome than in getting a foundation. Piles almost innumerable were driven, grouting of lime, gravel, and cement

poured in by thousands of tons, upon which bricks, sleepers, and masonry were placed, and at last, at an enormous outlay of capital, and the application of the greatest mechanical and architectural talent, all the difficulties were overcome, and that yard stands as a monument of what British capital and British assiduity can execute.

It became necessary to have large culverts and drains, and as drawings would not so well explain all these things, and where many piles were driven, it was determined to have this model made, it is in the upper part of the quadrangular storehouse, in a room of immense size, and it is curious indeed to inspect it; every building more particularly the smithy is quite full of piles, under each of the slips and of the docks the piles are driven as closely as they could be got together. Every erection has a forest of piles of timber beneath it, and then the execution of the model, how beautiful, how accurately every thing is delineated; there is the house built for the commissioner and principal officers, view them through a powerful magnifying glass, and you are led to believe you look upon the reality instead of the mere model. It may appear a useless expense, but when it is remembered how important it may be should any buildings sink, or any of the drains blow up from the pressure of the water in them, that the exact position of every part should be known, it will sanction the expense. The model of the basin

with its caisson entrance and the gates of the docks are beautifully finished, and although it has been the work of years, we think the money well laid out, as there is nothing in the shape of a model for accuracy and elegance to equal this in England.

The storehouses in the dock yard are all built of stone and iron, and the roofs covered with slates, pillars, beams, rafters, window-frames, doors, &c. are all made of iron, and wood is totally dispensed with, it is a great protection against fire to the buildings, and should unfortunately a fire happen it can never injure the houses.

The great object of establishing this yard, was that of fitting out of ships in time of war; the difficulty of vessels getting into the Thames or Medway for going either to Woolwich or Chatham, was thus completely got over, however, the rapid strides in steam navigation makes it very easy to tow large ships into either of these rivers at present, and takes away from Sheerness Yard that importance which was then attached to it.

The first stone of the north end was laid in November, 1809, and the basin was opened, and the first ship taken in, in September, 1823, since which period, considerable improvements have been made by the erection of storehouses, roofs to the docks, and buildings for the manufacture of roman cement, which is carried on here very extensively to supply all the dock yards at home and abroad.

A very valuable stone which is found mixed with the shingle or pebbles, is thrown up by the sea upon the beach close to Sheerness, which is used for the manufacturing of the roman cement; it is a species of clay petrified, of a whitish brown colour, and is sought after with much avidity, for its superiority over every other description of cement stone: and when collected, is sold for fourteen shillings per ton, for burning into cement, for stuccoing the fronts of houses, and for uniting stones, and is in a few minutes after it is mixed as hard as stone itself.

A spacious residence has been erected for the Port Admiral, at the Garrison Point, and very commodious houses for the principal officers, have also been built, eight within the dock yard, and seven outside the yard facing the beach. The dock yard chapel is without the walls of the yard, adjoining the officers' houses; it is a handsome erection and capable of containing about fifteen hundred persons.

The cliffs of the Isle of Sheppy are about six miles in length, (the highest about 90 feet high) on the north and north east side of the island, they have long been celebrated for the numerous organic remains found in them; upwards of seven hundred different specimens of fossil plants, fruits, berries, and ligneous seed vessels have been enumerated. Among the animal remains found in these cliffs, are several varieties of the crab;

the nautilus in abundance, tortoises, the jaws of crocodiles, lobsters, and fishes, in fine preservation ; all these remains (animal and vegetable) are impregnated with sulphuret of iron, or pyrites, and it is necessary for the preservation of them previous to placing them in a cabinet, to dip them into boiling linseed oil, otherwise, after a few years they will crumble into pieces. Large masses of petrified wood are frequently found, principally oak and elm.

Sheerness is in the Island of Sheppy ; it has the river Thames and Medway on the west, and the ocean on the northern, and eastern sides. Sheppy is about 30 miles in circumference, being about 13 miles long, and 6 miles broad. A pier extending 1300 feet into the river, affords a good landing place. Until near the close of the last century, much inconvenience was felt from the want of fresh water, there being no wells in the place, and the ships and inhabitants of the town were supplied with water from Chatham, 14 miles distant, but the government having at a great expence, dug to the depth of 320 feet, and passed through several quicksands, procured at last a plentiful supply of good water, and three other wells have since been dug to supply all the town with this very necessary article for cleanliness, and for the purpose of quenching thirst. The view from the dock yard gates at Sheerness is most beautiful, as it looks towards the mouth of the river Thames,

and here every ship must pass to go to London, consequently ships of all sizes and of every nation are constantly passing and repassing, and there is a fine sea view looking out to the Nore, and thus away to the great ocean.

CHAPTER XXII.

WOOLWICH YARD AND ARSENAL.

ACCOMPANIED by our cousin Ardaseer Cursetjee, we paid a visit on the 18th of April, 1840, to this dock yard, it is eight miles east of London, situated on the banks of the river Thames, in the county of Kent; Woolwich Dock Yard, is said to be the oldest royal dock yard in the kingdom. It is about three quarters of a mile in length, and about one-sixth of a mile in depth. Woolwich yard has several building slips and dry docks, but it has of late years been more immediately appropriated for the fitting out of steam vessels belonging to the crown, and for this purpose an immense basin has been dug in the yard, capable of containing several of the largest steam ships which can lay afloat in the basin, and their steam machinery is fitted, tried, and adjusted here. There are several buildings surrounding the basin where the boilers are examined and repaired, and indeed, there is here every thing required for steam engines, and more particularly marine steam machinery. It is one of

those establishments in which the English government keep pace with the improvements of the day, and we think it would be very desirable for the government to rear up, in their own establishments, large numbers of men of every department connected with steam machinery, by taking young men apprentices, and thus in a short time the different steam ships when launched, could be fitted with their engines and machinery by their own people, instead of being obliged as they now are to get part of their engines in London, some from Scotland, &c.

Large docks are now constructing in this yard, and a great many improvements have been made of late, so that there is very little doubt from its proximity to the seat of government, and its situation on the banks of the Thames, that this arsenal in course of a few years will become one of the first importance.

The buildings and the storehouses are very large, and all the officers have suitable residences within the walls of the establishments.

There is a large smithy which has two steam engines, one of fourteen and the other of twenty horse power, the former is employed in blowing the fires, by forcing the air through large cylinders, and the latter in lifting two large tilt hammers, each of which weigh nearly four tons, they are lifted by machinery at the height of nine inches, and the strokes are from forty to fifty in one

minute. These hammers are principally used for manufacturing anchors, knees, and other large iron works connected with the establishment. A small steamer called the Locust was to be launched this day at this dock yard which we witnessed, and had the honour of seeing Lord Minto, who was come there to see the launch.

At Woolwich also is an extensive establishment for making cannons, fireworks, and gun carriages; it is called the Royal Arsenal, and one of the furnaces here will melt seventeen tons of metal at one time. The cannons are first cast into moulds, and then bored with machines, moved by three horses; these animals are so trained that they stop and go on by the ringing of a bell; we were astonished to see them evince such signs of intellect, and it shows that animals have, with the exception of the faculty of speech, reason and understanding equal to man. It takes about four or five days to bore a large gun; the process is extremely simple, and upon our remarking why a steam engine was not used to propel the machinery, we were told that the present plan is so perfect that eighty years have now elapsed since its adoption, and that during this long period it has not cost £100. to keep it in order; notwithstanding this an engine is to be erected very shortly, and there is little doubt that the work will be performed with much more rapidity than at present.

In a building called the laboratory are deposited models or samples of congreve rockets, bomb-shells, hand-grenades, carcasses, fire-ships, and all the articles used in modern warfare. A man who is in charge of the building explains the use of all the things that are to be seen here.

There is a large building 300 feet in length, on the ground floor of which are to be seen an immense number of different things with which ships of war are supplied, and there were 150,000 muskets, which were kept in deal boxes, ready to be issued; above this is what is called the harness room where 10,000 military saddles and a great number of harnesses are kept in readiness for the army, the whole arrangement is very good, as there appeared to be a place for every thing and every thing for a place.

On two sides of this building are large plots of ground where thousands of guns and shots are kept which appear very beautiful. The whole of this establishment occupies an area of 60 square acres, and here different people are taught the art of gunnery, or how to use most effectually the articles here manufactured for destroying armies, burning ships, storming fortresses, and bombarding towns.

We admired the arrangement, and order, and discipline of the establishment, but we cannot say that we were pleased with it; we could not help thinking what a sad and melancholy reflection

it is upon poor human nature, thus to construct machines as it were for the wholesale destruction of human life—for destroying our fellow brethren on earth, whom the merciful and benevolent God created to love and do good to each other.

We indulge in the hope that these implements may never be used for the purpose they are intended, that when education has more generally diffused itself, that all warfare will cease, and peace and love will prevail, and that when nations or states quarrel, they will appoint arbitrators to settle the difference without any bloodshed.

CHAPTER XVIII.

THE CUSTOM HOUSE, AND THE DOCKS
OF LONDON.

AMONG the many scenes of London, perhaps there is not, on certain hours of the day, one of more activity than the Custom House, to which we just allude. It is not very far from London Bridge on the side of the river; it is the place where all ships that are leaving London, with ~~perhaps~~ or even if in ballast, have to obtain a receipt or clearance, stating the day they left the port and the nature of the cargo. All ships, upon their arrival, have to be reported, and the strictest account given of every thing they have on board, in order that the several officers connected with the customs may take an account of the same, and that the duties may be paid thereon. The Custom House is a beautiful building of modern erection, the former one having been burnt down in 1714. The length of the front is about 500 feet; and the great room for business, commonly called the long room is nearly 190 feet long and 66 feet wide. And there are many

hundreds of persons, consisting of captains and mates of ships, clerks to merchants, brokers, and shipping agents, in this room every day.

The commerce of London is much facilitated by the capital accommodations afforded to shipping by the immense large docks for the merchant vessels, where they have their cargoes taken out and put into warehouses. In these docks many vessels lay in still water alongside quays. The London Dock Company was formed in 1800, and their docks extend from Wapping to Shadwell, containing in the whole about 70 acres of ground; the docks are large enough to contain three hundred ships, exclusive of lighters, and the warehouses can hold 200,000 tons of goods. There are also vaults or cellars for 70,000 pipes of wine or spirits, and in addition to which there is a commodious jetty 800 feet long and 65 feet wide, with a shed thereon 450 feet long, under which an immense quantity of goods intended for shipment to India, or Australia, are stowed conveniently for putting on board the vessels which lay on either side to receive goods. There are at this time (March, 1841,) thirty-two large ships taking in their cargoes, and it was amusing to see the varieties of articles shipped for some of the new Australian settlements. There were *entire houses* cut out in frame, and numbered and marked in such a way that they can readily be put together in a few hours after their arrival. We were told that

a church had been sent out this way, and we saw all the varied furniture, glass, china, earthenware, &c. shipped here, and one would think there was enough to stock a nation.

Two ships deeply loaded for the Australian colonies were just passing out, and we saw a face or two, peeping from the cabins, of persons, who no doubt were about bidding a long, most likely a last, farewell to their native land.

The western dock has 20 acres, the eastern dock 7 acres, and the Wapping basin 3 acres, of water. The Shadwell entrance is three quarters of a mile below the Wapping entrance, it is a mile below the Hermitage entrance and nearly a mile and a quarter below the entrance to the St. Katharine's dock; the whole of the wharfs were strewed with casks, called puncheons, of 100 gallons, and hogsheads of 56 gallons, full of brandy, of which immense quantities are now being imported, it being generally thought, that the import duty upon brandy and French wines are about to be lowered.

They sometimes employ here from three to four thousand persons. There are also the East India Docks at Blackwall, the West India, the Commercial Docks, St. Katharine's Docks, and the Grand Surrey Canal Docks. We were here informed of what appeared to us a most singular fact, that the number of *acres of water* in the London Docks, are just equal to the whole

number of land and water within the St. Katharine's Docks, and that the acres of water in the West India Docks are just equal to the whole of the land and water contained in the London Docks.

These docks are of great importance and value to the merchants of London, as prior to their construction, ships had to be unloaded in the river into barges, lighters, or hoys, and the plunder was immense, but now the property is secure from danger, as the several dock companies hold themselves responsible for the safe custody of all goods landed in their respective docks.

Much inconvenience is experienced by parties who formerly used to deposit goods in the East and West India Docks, from the heavy expense of carting them, in consequence of their being situated about three miles from the city, and it was thought by some that the difficulty would be obviated by the erection of the Blackwall Railway, but competent persons who have seen the operation of other railways now in use, tell us that heavy bulky articles will never be conveyed in any quantities upon rail roads, as the price charged per ton for conveyance will become very expensive.

The East India Docks are now and have been for some time used as a sort of canal for steam ships, and others, to lay up in instead of for the purpose they were originally intended. The outlay in the erection of the London Docks some

some years since, was proved to have been three million and two hundred thousand pounds. We strongly recommend every person who can obtain an order to pay them a visit as they possess much to attract general interest.

CHAPTER XXIV.

VAUXHALL GARDENS.

WE paid an evening visit, during our residence in England, to this delightful place of amusement. They are on the Surrey side of the water, not far from Vauxhall Bridge, and we were amply repaid for the trouble we took to visit this place. The lamps, of all sorts of colours, with which this place is illuminated, are almost innumerable; the gardens are laid out most tastefully, and upon nearly every tree lights are hung, as well as all along the gravel walks, arranged the same as ours in Bombay upon festive occasions, commonly termed "Lunca." At one end of the gardens is a handsome fountain of water, where Neptune, the heathen god of the sea, is represented in the act of driving his chariot with five horses; the figures and the attitudes of the horses are remarkably well executed; the water is forced through the nostrils of these animals by a steam engine, but the most surprising thing is the smoke or vapour that comes from the nostrils similar to

that which is seen to arise from hard driven horses, when they are out of breath, and which is accompanied with the noise similar to that which is made by horses when they breathe with difficulty caused by being overdriven. We spent four hours promenading in all the parts, and saw most magnificent fireworks, which were very far superior to any we have in Bombay. Refreshments of all kinds may be had in the boxes fitted up for that purpose in the gardens; the prices of all the things that are sold are fixed up in each box. The entertainments, besides the brilliant illumination and the fireworks, consist of little theatrical performances, with some very good hired dancers, singing, and a very good concert by a large band, which plays until a very late hour; and if the weather is fine, a large number of the persons amuse themselves with dancing. The gardens were open three nights in each week, Monday, Wednesday, and Friday; the price of admission was four shillings. The doors opened at eight, and the performances commenced at nine. It was (for we speak of it as a thing no longer in existence) a most charming way of spending a rational agreeable evening.

CHAPTER XXV.

ILLUMINATION OF LONDON.

ON the 10th of February, 1840, Her Majesty, Queen Victoria, was married to her first cousin, Prince Albert of Saxe Coburg and Gotha, and as we were near London, we made up our minds to see the beautiful illuminations that were to take place in the evening in honor of that event. The weather had been squally during the day, but in the evening it became tolerably fine. The greater part of the illuminations consisted of small variegated oil lamps of all colours disposed into fanciful devices, and in many instances forming words. The gas was in many instances used instead of lamps; and very beautiful devices and wreaths was the lighted gas made to form. The prevalent devices were a star, a crown, V. A. for Victoria and Albert, or V. P. for Victoria and Prince, or V. R., Victoria Regina, and P. A., Prince Albert. Wreaths, called love knots, were to be seen, and another brilliant one, called a bride's favour, was abundant. The East India.

House had two stars enclosing the letters V and A, surrounded by two cornucopias, or horns of plenty; the whole supporting a magnificent imperial crown, with laurels, &c. Along the columns in front were suspended strings of lamps, and a double string of lamps extended along the whole front of the building. The whole of the illumination of the India House was in variegated lamps, and had a most beautiful effect. There were immense crowds in the street, and upon Cornhill we got separated from our friend. There was a pretty transparent lighted picture at the British Bullion Office, on which was "Long may she reign." The Mansion House had V. A., a star, and a crown. At the Bank of England the illumination was very beautiful—it was a perfect glare of light. Each lamp along the front had a star in gas over it; and the whole row of lamp posts was united by double festoons of variegated lamps. In Cheapside there was a beautiful transparency at Butler's, the chemist's, and the Atlas Insurance Office, was very beautiful. Somerset House, in the Strand, crowns and stars in gas, and beautiful lamps. At Ackerman's, the printseller's, in the Strand, was a beautiful transparency of the Queen, and the motto,

"Great and glorious, firm and free,

"Still victorious may she be;"

and, underneath, "Britain's pride;" the arms of England, and the Lion and Unicorn. This was

by far the handsomest thing we ever saw. A great crowd was assembled here. All the club-houses at the west end of London, where the nobility and gentry resort to, were very beautiful; and all the houses belonging to the tradesmen with whom the Queen lays out her money, were brilliant. The Ordnance Office in Pall Mall was the most brilliant; with lamps in the centre were the arms of the Ordnance Department, and, in the upper part, white roses and Albert and Victoria, the order of the Bath and the order of the Garter, the order of the Thistle and the order of Saint Patrick, with branches and fruit on them, and, below, cannons with piles of cannon balls. This was as beautiful as an illumination could be. The Admiralty had, in variegated lamps, an anchor and the union jack flag, and branches with V. R. and P. A., all in lamps. The War Office, crown, initials, and the order of the Bath. The Horse Guards was most brilliant; it was gas lights introduced into coloured lamps, and was most beautiful. The Treasury was also very brilliant. We cannot select any others, as the whole of the streets was a perfect blaze of light; and it has never been our good fortune to see so brilliant, so beautiful, so gorgeous a spectacle. It was truly pleasing to behold the countless thousands of people orderly and happily doing homage to their Queen, and thus cordially testifying their approbation in the choice she had made of a husband;

and we, as subjects of the British Crown, felt as much happiness and interest in the scene as any one; and we had passing in our minds that the great and good God would bless this marriage. We hoped that to the Queen individually, and to the nation generally, the union that had that day taken place might be productive of lasting benefit. We felt happy that as she had thus early become a wife, that she might have a something in this world especially to love and to live for—that she might have a kind constant friend, an agreeable companion. And we wished, what we stopped in England long enough to see realized, that their union might be blessed with children. We would implore of our universal Deity that health may be her portion for many years. May she have firmness of mind to enable her to reign in the hearts of her people for very many years. May she always, remembering the valuable instruction she received from her mother, set apart a portion of every day to superintending the early education of her offspring, grounding them strongly in the love of virtue and the abhorrence of vice; so that in after days should any of them be called upon to rule over a mighty nation's destinies they may be found fitted for the task. May Prince Albert her husband love and cherish her as he has sworn to do. May their pilgrimage on earth be for many, many years; and may they both so live as to occupy positions of bliss in a brighter sphere.

It may not be known to many of our countrymen, that the husband of a reigning Queen of England, does not by his marriage become a King. And as he is not allowed any political power, he has a difficult part to abstain from mixing up in the political parties, that are constantly before the public with some agitating question, but in so doing he will promote his own happiness. For what makes the public cheer a man in the streets of England one year, the self same public, or mob as they are called, will hoot the same person for years after. Political popularity is very uncertain. Very many of those who were almost worshipped by the mob a few years ago, now because they are not prepared to go quite so far as public feeling requires are quite unpopular. Men who have been foremost in introducing reformation into certain institutions, because they are not prepared for a total change, are thought to be altered men by the public. When the real fact is that it is the public who have altered and not the individuals. A great many important alterations have been made within the last ten years in government regulations, but still the people who carried out these things know that there must be a stop some time to alterations, and then the public say "they are not prepared to go far enough." Mob popularity is therefore not to be coveted.

CHAPTER XXVI.

WINDSOR CASTLE.

On the 31st of March, 1841, we went to Windsor to see the private and public apartments at the castle, for which we had an order from the Lord Chamberlain, the Earl of Uxbridge. We left London in company with our friend, Mr. Robert Adams of Chatham Yard by the Great Western Railway at nine o'clock in the morning, and reached Slough in about thirty-five minutes, from whence we proceeded to Windsor by an omnibus.

The entrance to the castle is seen by turning up Castle Street, and a fine road leads to it. The first building that arrested our attention was St. George's Chapel, a noble and magnificent old structure, we then came to a most capacious quadrangular paved court, at the west end of which we saw an equestrian bronze statue of King Charles the Second, which we were informed formerly stood in the centre of this square. The appearance of the castle from the quadrangle is very majestic and grand. The public apart-

ments which are always open for inspection are on the north ; Her Majesty's private apartments are on the east and south, and the round tower on the west side of the square.

A considerable portion of the castle has been repaired and much improvements made by the celebrated Architect Sir Jeffry Wyatville by the order of King George the Fourth, to whom, the credit of rendering this place truly worthy of the residence of British sovereigns, is to be attributed ; he spent large sums of money in augmenting and furnishing the palace, and his notions of things is said to have been princely ; this personage is represented as the first gentleman of the age he lived in, he was the most accomplished man that ever adorned the British throne, and for politeness and elegance of taste he is said to have been never exceeded.

He never had any thing done which was not truly splendid and magnificent, he cared little for spending thousands of pounds upon objects which were of no other use than to please the eye.

We first saw the private apartments, we entered through what is called the visitors' entrance, and a lady, who is the housekeeper, showed us the apartments. On ascending a noble stair case we entered a corridor which at first sight struck us with amazement and wonder, it is what we should call a varendah, 520 feet long and about 18 feet wide, by folding doors it communicates with

all the principal rooms. It is also used as an indoor promenade when the weather is unfavourable and is so costly and tastefully furnished as to baffle all description. The ceiling is very richly gilt in various pleasing and ornamental devices, and on both sides of the corridor are placed a variety of ornamental and curious things, elegant cabinets, tables, chairs and such other things, ancient and modern, so distributed as to afford a varied and pleasing picture to the eye; here are some hundreds of busts in marble of members of the Royal Family, foreign princes, English noblemen, heroes who fought battles and other distinguished persons living and dead, almost all of which were the productions of the best sculptors.

The corridor is divided into two parts by a pair of folding doors, which when opened the whole length, with the splendid furniture give it an air of grandeur and magnificence not to be surpassed.

We were then shown into the Dutchess of Kent's apartments, which consisted of a drawing-room, a dressing and a bed room, the walls of these rooms are hung with beautiful and light coloured silk damask, and the ceiling and doors are chastely ornamented with gilt mouldings; the bed was after the French fashion, that is, a bedstead, without the curtain poles, is placed against the wall and three poles project out above the bed, the middle one of which is a little higher than the other two, over these the curtains are thrown, it is

also called a canopy bed. The frame of her Royal Highness's bedstead was nicely carved and gilt and the curtains was of fine silk.

We then came into a small room in which we were informed that the late King and his brother King George the Fourth died, it was handsomely fitted up, but not in use.

From this we were conducted to Her Majesty's writing room, which was a small one but elegantly furnished, the walls were covered with silk and the ceiling and the doors had some very good carving, which was gilt.

There are three large rooms which are called the white, green, and crimson drawing rooms, which are the best, and the most expensively fitted up ; their walls are hung with fine silks of the colour that their names respectively indicate, and chairs and sofas cushioned with silks of the same colour and quality, the carpets are very beautiful of the first rate workmanship, and of the colour to match the hangings. These rooms are lighted with very large and handsome windows, and command a delightful view of the park together with the country several miles round.

The doors which lead from one room to the other have on their pannels, carved devices, all different from each other, the carvings are the most perfect specimens of the art and masterly executed ; all the doors are most luxuriantly gilt and burnished, and the appearance of these rooms,

the magnificence and the costliness of furniture and the profusion of gilded decorations, all is so beautiful and so truly splendid, that we cannot by any possibility convey even the faintest idea of it to our countrymen ; suffice it to say that it is *quite worthy* of the occupation of Kings and Queens of this mighty country.

Next to the crimson drawing room is the Queen's dining room, which is of princely dimensions. On a gilt table stands the magnificent wine cooler, made in London by the celebrated jewellers, Rundell and Bridge, for King George the Fourth ; it is silver gilt, richly chased, and most exquisitely finished. We could not learn its weight, but is large enough for a full grown person to sit in with ease, and requires six men to lift it. This splendid thing is said to have cost £10,500. sterling !

We forgot to mention, that in the corridor there is a cabinet of dark wood, very beautifully carved, and which belonged to Cardinal Wolsey, who lived in the sixteenth century, and that all the cabinets in the splendid suite of rooms we have just noticed, are of most superb manufacture, many of them were inlaid with mother of pearl, ebony, satin, and such other expensive wood.

We are much indebted to the housekeeper for her attention to us. We here think it proper to state, that the Queen's own apartments are not

allowed to be shewn to any one, and they are only open when her Majesty resides at the castle, and the private apartments can only be seen during her absence from Windsor.

The state apartments are open to the public every day (except Sunday), from nine in the morning till six in the evening. They are also magnificent and well decorated rooms, and will amply repay the trouble of visiting them. These apartments command a delightful prospect of the picturesque and almost evergreen neighbourhood of Windsor, and contain a valuable collection of oil paintings and tapestry.

The entrance for the public is through a porch, where a porter is stationed (the present porter is a civil man, and has all the court politeness about him), and ascending a flight of stairs, we come to a small room called the Queen's Audience Chamber; the walls are decorated with French tapestry, that is, pictures made by coloured woollen threads, on a coarse fabric, and so beautiful is the working of it, that one could hardly believe it was not a painting, and to prove how nearly it resembles it, the ceiling, which is really painted in the same style, is very difficult to distinguish from the tapestry, as the whole looks as if it were done by one artist.

Going through a door on the right, we find ourselves in the Queen's ball room, which is of great length, but the appearance is very plain;

the ceiling is of stucco, and there are a great many pictures by a celebrated artist called Vandyke, among which is a portrait of his own, and a head of King Charles the First, in three different views, which has a rather novel appearance.

The next is the Queen's drawing room, which has eight paintings by Vandyke. The ceiling of this room is of stucco, and emblematically painted with the arms of England, and bearing the initials W. R. Leaving this, we were shewn into the Queen's closet; it is a small room, and there are a great many paintings by different masters; we had one particularly pointed out to us, which we were told was painted by a German of the name of Quintin Matsys; the picture represents two misers in the act of counting their money, and, indeed, it appeared to us to have been masterly done; the money, both in gold and silver, was so well painted, that it appeared as real coins; this picture is very much admired. We here saw two tables, of about three feet in length and eighteen inches wide, made of massive silver, and highly finished; they were both presented by the Corporation of the City of London to Charles the Second, and William the Third; here are also three large glasses with massive silver frames. The hangings are of light blue flowered silk, and the frames of all the pictures are silvered instead of gilt, which matches with the silk, and the whole of the furniture has a chaste and elegant appearance.

The King's council, and drawing rooms, are very fine; they have silk crimson hangings, on which are worked the Crown, the Order of the Garter, and the initials G. R. (Georgius Rex), they are decorated with good paintings, and the ceilings are also painted, there is the anchor, trident, and other emblems of naval superiority and pride of England, painted on the ceiling of the Council room.

The Throne room is complete, with the exception of the throne, and the part of the ceiling over the throne is very richly decorated; it is of large dimensions, and has three full sized large portraits of King George the Third, and Fourth, and the late King; we looked at these likenesses with wonder and surprise, at the perfection this fine art is brought to in England; we could not speak as to their faithfulness, but the robes, and the effects of light and shade, are very beautifully done. This room is used by the Queen on state occasions, when the throne is placed for her to sit upon.

We were next shewn into a splendid apartment, called the ball room, which is 90 feet in length and 34 feet in width, this surpassed every thing else that we saw in the castle. We gazed on this splendid room, and at the costliness of its fittings, with perfect astonishment. The walls are hung with tapestry of the best kind, and the ceiling is divided into five parts, the moulding and

centres of which are decorated with various devices in high relief; the cornice is equally elegant, and the whole of the relief work is gilt very beautifully. The room is 33 feet in height, and four elegant chandeliers are suspended from the ceiling, which, when lighted, must, we think, produce an effect not to be seen any where else but within the walls of Windsor Castle. Large doors, which lead from this magnificent apartment to the throne room and the Waterloo gallery, have superior and gilt carved work, that can never be described except by the pencil of an artist—they bear the initials G. R.—as well as the fire-places, which are in workmanship suitable to the room.

King George the Fourth had this room furnished, and it shews his taste and his fondness of splendour. We should say, that it would be next to impossible for any man to attempt an improvement. It is the most perfect and unique in itself, and will admit of no alteration that could give it a better appearance. The chairs and sofas are all richly gilt, and have cushions of a most lively and beautiful silk crimson velvet. We strongly recommend every stranger that visits England, and every Englishman who can afford to pay the expense of going to Windsor, to see this room only, if not all the public apartments, for which no charges are made, and we are quite sure that they will be amply repaid for their trouble. The floor is of oak, and tastefully inlaid with ebony. At one

end, the room is lighted by a large gothic window, and commands a very fine prospect.

The Waterloo Chamber or Gallery as it is sometimes called is 98 feet long, 47 feet broad, and 45 feet high, and is in the Elizabethan style of architecture. In this room all round are hung portraits of eminent men, sovereigns (except Napoleon) commanders, and statesmen connected with the battle of Waterloo, the hero (Duke of Wellington) who fought the battle, is very conspicuously placed in the centre of the wall at one end, and we think if his antagonist was placed opposite to him, it would have added considerably to the interest of the collection; four massive chandeliers are suspended from the ceiling, and there are projecting galleries at either end of the room for the musicians. The furniture, as well as the doors, panellings, and the wainscoating at the lower part of the walls are of light coloured oak.

We should think that this room will not at all please a Frenchman, nor will he wish to see a thing so wounding to the vanity of his country, or to the national pride.

There is also a large room called the guard chamber, where a great many things and trophies taken in former wars and battles are preserved, as a sort of national and military pride,—for here is a piece of the mainmast of Lord Nelson's ship, the Victory, through which a 10 inch shot passed, at the battle of Trafalgar. On the top of the mast,

is a bust of the immortal commander himself, executed by Sir Francis Chantrey. On both sides of this are two pieces of brass ordinance taken at the capture of Seringapatam, one of which is richly inlaid with gold and silver.

There are also busts of the two greatest heroes England ever produced, the Duke of Marlborough and the Duke of Wellington, and a shield made of silver and inlaid with gold, presented by Francis, King of France, to King Henry the VIIIth, it is beautifully engraved and revolves on a pivot over the fire-place. Many armours and implements of war such as we have described seeing in the "Tower of London," are also to be seen here.

The celebrated St. George's Hall is 200 feet in length, 34 feet in breadth, and 32 in height; the south side of this room is entirely occupied by windows which are thirteen in number, and the north wall and the ceiling are embellished with the shields and the armorial bearings of all the Knights of the Garter, since the time of its establishment. The ceiling is executed in plaster, and painted in imitation of oak, which is so well done that one is apt to be deceived unless told of it. The armorial bearings are arranged in chronological order, and are all numbered so as to be easily distinguished. The furniture such as sofas, chairs, &c., are all of oak, and at either end there are galleries for musicians, and at the east end is a large chair on a platform for the sovereign to sit

upon, at the time of the installation of the Knights of the Garter, the ascent to which is by a flight of oak steps, and the view and the perspective of the hall from this platform is very beautiful.

The next room we saw was the state ante-room ; some fine tapestry and carved work form the principal decorations of the room ; here is also a beautiful painting on glass of King George the Third in his coronation robe, and the ceiling is also beautifully painted, the subject of which is from the heathen Mythology.

Here are some additions made to the castle, consisting of a vestibule and a fine staircase, by the late king ; it is in the Elizabethan style of architecture, the walls and the staircase are of Bath stone with steps of Portland stone, and a beautiful statue of George the Fourth, executed by Sir F. Chantrey, is placed here.

The staircase communicates with rooms below, and leads to the quadrangle, this improvement must have cost a large sum of money.

There is belonging to the palace a very curious and singular building called the Round Tower, which is the residence of the governor or constable of the castle. In former times when England was perpetually disturbed with foreign and domestic wars, this edifice was intended for the imprisonment of distinguished men, and many foreign kings, English and other noblemen have suffered captivity within the walls of this building ; the last

person that was here confined was a German of the name of Mareschal de Belleisle, in the reign of George the Second.

The Tower stands on an artificial eminence, it is circular and built entirely of stone, the diameter is about 100 feet, and it is upwards of 200 feet in height, there are two hundred steps from the bottom to the top, from whence there is a most extensive and luxuriant view all round ; we were told that on a clear sunny day twelve different counties are seen from here.

When the Queen is at Windsor, a flag, which is called the royal standard is hoisted on a staff, the extreme length of which is 73 feet. The flag is 36 feet in length, and 24 feet in breadth. When we looked round from the top we could see but very imperfectly the prospect which it commands in consequence of the day being hazy, and we could not help thinking how charming and delightful a view from such a place would be in India, where there is always a clear sky, and if we may use the term, perpetual Summer.

The beautiful place of worship called St. George's Chapel, where the Queen and others who reside in the castle perform their devotions, is entirely built of stone ; the roof which is of the same material, is of an elliptic form, supported by lofty and handsome pillars, the principal entrance is near the west end, and we were very much struck with the neat and elegant appearance of the interior of

this edifice. At the west of the chapel is a monument called the "Cenotaph" of Princess Charlotte of Wales, daughter of George the Fourth, it is executed in marble, the Princess is represented as sleeping, and her body covered with drapery, but the outline is well preserved, and there are two female figures, deeply bewailing her loss, and absorbed in the deepest grief, the whole is very well executed, and it was a very affecting sight to behold.

The floor is paved with black and white marble, and underneath it is the vault for laying the bodies of members of the royal family; we were told that the bodies are enclosed in coffins and stowed away in this vault.

There is no door or any other entrance to the vault, and it is never opened except to deposit a body, for which an aperture is formed by taking up a few stones of the paved floor, which are replaced soon after. There are many distinguished persons interred here, and marble tablets are placed where they are buried to record the event, as well as to preserve their memories. Close to the altar which is at the east end of the chapel, is the Queen's pew, it is on a raised platform, and very plain in appearance; below the pew is a very beautiful and elaborate piece of steel-work, wrought and most exquisitely finished by the celebrated Quintin Matsys, who was a blacksmith, at Antwerp, and who afterwards dis-

tinguished himself in the art of painting. The work consists of a pair of gates between two towers, and is a perfect specimen of its kind.

The joinery and the canopies over the pews, which range on both sides of the chapel are of very good workmanship, and have a great deal of carved work. We admired the whole of the interior of this chapel very much, though the outward appearance is not very pleasing, because it shows signs of decay in some parts. This edifice with all the decorations must have cost a great deal of money, and we remarked to our friend whether he considered it necessary that such grandeur and magnificence was required in a divine place, where men had only to pray to their Creator for the forgiveness of sins; and we were informed by him, that it was the great fondness of architectural beauty in former times that led people to erect costly edifices for worship, but that modern churches are very plainly built, we approve this plan very much, as we think that the money spent on mere beauty may be applied to other more useful and charitable purposes, and relieving the necessities of the poor.

We were next conducted to the royal stable, where we saw the Queen's horses, there were a great many of bay coloured, large, strong English horses; we were informed that there are seventy of them, and are used for driving in the carriage; we also saw a number of ponies and riding horses,

and two carriages, a phaeton and a landau, both of them were without any decoration, they were quite plain, and we should think not very expensive; these two carriages are expressly for her Majesty's own use; she drives in them in the great park, for which purpose they are very slightly constructed. We were told that all the other carriages were in London in consequence of the Queen residing there at the time; we have had the honour of seeing the Queen driving in these carriages, they are very magnificent and costly, and such as we may never perhaps see in our own country.

There is also a very peculiar carriage called the state coach, very beautifully carved and gilt, and is said to have cost upwards of £7000., it was built in 1762, and is made use of on state occasions, such as opening and closing of Parliament and at the coronation.

A room of considerable dimensions called the riding school, and large stables are now building at Windsor for which a sum of £70,000. was voted by the House of Commons last year. This we think was very necessary, because the present stables are by no means handsome or worthy of accommodating royal carriages and horses, as there are a number of small rooms, the largest of which could not contain twenty horses.

The last thing we saw before leaving the castle was the plate room, of which we can but give a very imperfect description. There are two rooms,

the smaller one is called the closet. In the large room is kept a complete silver gilt service by George the Fourth, to dine one hundred and thirty persons ; it comprises every necessary article in a dinner set ; there are thirty-two dozens of plates, which are said to cost twenty-six guineas each, and other articles in proportion. On a table in the centre are placed various richly chased and gilt ornaments, which appear very beautiful, and we were informed that eighty large chests containing the plate were at Buckingham palace.

In the closet we saw in glass cases a great many things, some taken from the Spanish Armada, some from Burmah ; one vessel belonged to Charles the Twelfth of Sweden, and a small elephant in silver belonging to the king of Ava. There are two beautiful things taken at the capture of Seringapatam from the palace of Tippoo Sahib, one is a peacock set in many kinds of precious stones, valued at £30,000., and the other Tippoo's footstool ; it is a tiger's head made of pure gold, having a solid ingot of gold for his tongue, and crystal teeth ; it is very beautifully finished, and is valued at £15,000. sterling.

Numerous ornamented shields are also here, one of which was made from snuff boxes of King George the Fourth, besides which there are a great many curious things, and the whole is valued at about £1,750,000!! placed under the superintendence and care of a polite and gentlemanly

person, and who was very civil to us. The plate rooms are in a damp situation, which does not allow the things to remain bright, as they soon tarnish and require frequent cleaning. We were very much astonished at seeing this, and we were filled with wonder at the magnificence of the castle and every thing that it contains; it is impossible to set any value upon the whole, it must be a sum that would appear incredible; we can only say that none but the English nation could make and support such an establishment, and we do not doubt the assertion we have often heard that Windsor Castle stands unrivalled in Europe. It appears most extraordinary to imagine the large sums that are spent upon public institutions and establishments in England, and it is very justly denominated the most powerful, the wealthiest and the most wonderful country in the world. Our countrymen must know that besides Windsor Castle, there is the Buckingham Palace in London, and a palace at Brighton for the residence of the sovereign, which though not so large, yet must be equally well furnished. We were highly delighted at seeing Windsor Castle, of which the English may be very properly and justly proud.

CHAPTER XXVII.

THE EAST INDIA HOUSE.

This celebrated and well known building is situated very conspicuously in Leadenhall Street, a small building formerly occupied the site of the present east wing, and the inconvenience that was then experienced in accommodating the various branches of the Company's business led them in 1799, to the construction of the present stately edifice from the designs of Mr. Jupp, a celebrated architect.

The front is composed of stone, with a noble central portico and the two wings are 200 feet in length ; the portico is very high, and consists of six beautiful fluted pillars which support a handsome entablature and pediment, the frieze is very ornamentally sculptured, on the apex of the pediments stands a fine statue of Britannia, and at each corner figures of Asia and Europe the former mounted on a mule and the latter on a horse. The pediments contained emblematic sculptured figures representing the commerce of the Company pro-

tected by King George the Third, during whose reign the building was erected ; the King has a shield in his right hand as if to shelter the other figures. The portico gives the front an air of magnificence and splendour quite worthy and becoming the great and influential body to whom it belongs, and the vast and important transactions that are carried on within its walls.

Before we describe the interior of this magnificent buildings we will endeavour to convey to our countrymen a short account of the origin of this company, the history of which is unparalleled and unprecedented in the annals of nations, we could but give a very imperfect sketch of this great body, as it is a subject that requires extensive knowledge on various points, and which task has been ably performed by many English writers, to which we refer our countrymen if they feel an inclination to peruse them.

We would now proceed with the account that we propose to give, and which we have gathered from works treating on the subject.

We have before observed that the Cape of Good Hope was first doubled by the Portuguese mariner, Vasco de Gama, which route opened the way for the Europeans who were always forward in commercial enterprize. The Portuguese and the Dutch two powerful maritime nations in that age enjoyed the privilege of trading with India from which they derived great advantage.

The attention of the English people having been excited by the success of their neighbours, in the year 1600, a body of merchants formed themselves, and obtained a charter for exclusively trading to the east, for a period of fifteen years. The number of persons that composed this body was two hundred and sixteen, they chose twenty-four members and formed a committee to manage general affairs of the corporation, and every proprietor had to keep his own account, and were only restricted to a few regulations for the guidance of all. About ten years afterwards the company obtained a charter for an unlimited period, and after two years they were permitted to establish factories at Goga, Surat, Ahmedabad and Cambay this encouragement led them to unite the capital, and new funds were raised to extend and facilitate commerce, and they reaped so good a profit by the exclusive right they thus enjoyed, that in 1616 a new subscription was opened, which produced a sum of one million six hundred thousand pounds sterling. In 1627 people feeling jealous at the prosperity of this association and doubting the propriety of their enjoying the privilege of trading for an unlimited period which was granted to them, brought forward many complaints, and licence was given by the crown to parties to trade with India. This measure tended much to injure the association and they in vain struggled to cause this license to be withdrawn. In addition to this

a division in 1655 among the proprietors took place and the dissatisfied party succeeded in obtaining permissoin from Oliver Cromwell the Protector to send out ships to India, they however united with the parent company in the course of two years.

In the year 1693, after much controversy, the House of Commons passed a resolution to the effect, "that it was the right of every Englishman to trade to any part of the world, unless prohibited by act of Parliament." This, of course, threw open the way to those who were wealthy and enterprising. A new association was now formed, and through their interest with the Government, they obtained a charter for incorporating themselves into a public body, and of course became rivals to the existing company. These two corporations, however, experienced so much difficulty in carrying on their commerce, and each knowing how very detrimental it was to their mutual interests, and how much they both suffered from the ill effects of competition, that they completely and finally joined together in the year 1708, and assumed the title of "The united Company of Merchants trading to the East Indies."

This union was recognised by Parliament, and the company stood nearly on the same footing till the subsequent acts, which deprived them of the privilege of trade, and left to them the government of India which they had gradually acquired. During the time that we have thus briefly noticed

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the transactions of this company, they were compelled, by the necessity of self-defence, to possess themselves of several places in India to protect their property, and were thus forced to become masters of those places. The establishment of Fort St. George, at Madras, and the grant of Bombay in 1668; the footing gained at Calcutta towards the end of that century tended much to the permanent settlement of the British power in India, and soon led to the acquisition of the interior of Hindoostan. The battle of Plassey finally established the superiority of the English as a warlike nation, the acquisition of the Mysore territory, and the Maharatta countries, extended their dominion, and Great Britain now holds under her sway nearly the whole of the Peninsula of Hindoostan.

The last charter was granted to the company in 1833, which completely deprived them of the commercial privileges, leaving only the government of the country in their hands, until the year 1854, when the charter must be renewed.

Our countrymen would now like to know how the Court of Directors, of whom they have heard so much in India, is composed, what they are, and how they carry on the government of that mighty country; we therefore copy the following account which we read in the first volume of Mr. Montgomery Martin's *History of the British Colonies*, and which we think far better and more

comprehensive than what we with our limited knowledge of the subject could give; and as that gentleman has compiled the work from official records, its authenticity cannot be doubted even for a moment. He says: "The government of the British possessions on the continent of Asia is vested in two powers with co-ordinate authority; viz., the East India Company and a Ministerial Board, termed His Majesty's Commissioners for the Affairs of India, the latter being devised by Mr. Pitt, as a check upon the political proceedings of the former. A few words will be necessary to explain this complex authority.

"THE COURT OF DIRECTORS.—The more immediate governing power of British India, and consequently, the patronage attached thereto, is vested in the Court of Directors, or executive body of the East India Company. The capital stock of this company is £6,000,000. sterling, which is divided, according to a recent calculation, among three thousand five hundred and seventy-nine proprietors, of whom fifty-three have four votes, fifty-four, three; three hundred and forty-seven, two; one thousand four hundred and fifty-four, one; and two hundred and twenty-one hold only £500. stock, and are not qualified to vote, but merely to debate on any question; three hundred and ninety-six proprietors hold stock under £500., and are not

“ qualified to vote or speak ; and two hundred
 “ and twenty have not held their stock a sufficient
 “ time to enable them to vote. The stock must
 “ be *bonâ fide* in the proprietor’s possession for
 “ twelve months, to enable him or her to vote ; a
 “ regulation adopted to prevent collusive transfers
 “ of stock for particular occasions. The total
 “ number of *voters* is estimated at two thousand,
 “ and of the *votes*, about one thousand five hun-
 “ dred are comprised within four miles of the
 “ General Post Office. Women, as well as men,
 “ foreigners, as well as Englishmen, if holding
 “ stock sufficient, are empowered to vote or
 “ debate. A late classification of votes gave, of
 “ gentry, bankers, merchants, traders, ship own-
 “ ers, shopkeepers, &c., one thousand eight hun-
 “ dred and thirty-six ; of women (married, widows,
 “ and spinsters), forty-three ; of officers, in the
 “ King’s and East India Company’s army, two
 “ hundred and twenty-two ; of the clergy, eighty-
 “ six ; of officers in the royal navy, twenty-eight ;
 “ of medical men, nineteen ; of the nobility,
 “ twenty.

“ The proprietors meet as a court *regularly*
 “ every quarter, and specially, when convened, to
 “ discuss particular business. The powers vested
 “ in this court are, the election of qualified pro-
 “ prietors as their delegates, or representatives, to
 “ form a Court of Directors, to frame bye-laws for
 “ the regulations of the company, provided they

“ do not interfere with Acts of Parliament, to
 “ control salaries, or pensions exceeding £200. a
 “ year, or gratuities above £600. It may confer
 “ pecuniary reward on any eastern statesman, or
 “ warrior, above the latter named sum, subject,
 “ however, to the confirmation of the Board of
 “ control; it can demand copies of public docu-
 “ ments to be laid before it for discussion and
 “ consideration, but it is prevented interfering
 “ with any order of the Court of Directors *after*
 “ the same shall have received the approval of
 “ the Board of Control. The court of proprietors
 “ did interfere, *and with effect*, in the case of the
 “ maritime compensations; on the ground that
 “ their concurrence had not been obtained pre-
 “ viously to the application of the board. The
 “ Chairman of the Court of Directors is *ex officio*
 “ Chairman of the Court of Proprietors—debates
 “ are regulated as in the House of Commons—
 “ and all questions and elections are decided by
 “ ballots.

“ The Court of Directors, or representatives of
 “ the foregoing body of proprietors, consists of
 “ twenty-four persons, qualified according to an
 “ Act of Parliament, which provides, that each
 “ must be a natural born, or naturalised subject,
 “ of Great Britain; possessed of £2000. stock (no
 “ matter for what previous period), he must not
 “ be a Director of the Bank of England or the
 “ South Sea Company; and by a bye-law of the

“ company, he shall be liable to be removed if he
 “ should promote his own, or the elevation of any
 “ other Director, by promises of reward, collusive
 “ transfer of stock, or payment of travelling ex-
 “ penses, receive any pecuniary or other remun-
 “ eration whatever for any appointment in his gift
 “ or patronage as a director. Six directors retire
 “ annually by rotation, and are re-eligible after
 “ twelve months’ absence; the proprietors have
 “ a review of every director in the course of four
 “ years, and can of course remove, if they think
 “ fit, such as they may deem not fit for the duty
 “ which they ought to fulfil. The Court of Di-
 “ rectors elect from their own body a chairman
 “ and deputy chairman annually, meet once a
 “ week, not less than thirteen form a court, and
 “ all questions are decided by ballot. The court,
 “ in general, consists of men of various habits,
 “ views, and interests; by a recent analysis, there
 “ were ten retired civil and law officers of the
 “ company; four military ditto of ditto; four
 “ maritime ditto of ditto; three private Indian
 “ merchants; and nine London merchants and
 “ bankers; of these, fifteen were under ten years
 “ standing from the first election; eleven from
 “ ten to twenty ditto, two from twenty to thirty;
 “ and two from thirty upwards. The Court of
 “ Directors enjoy full initiatory authority over all
 “ matters at home and abroad relating to the po-
 “ litical, financial, judicial, and military affairs of

“ the company. But its proceedings are subject
 “ to certain Acts of Parliament; to the superin-
 “ tendence of the Board of Control, and in several
 “ matters to the approval of the Court of Pro-
 “ prietors.

“ For the dispatch of business, the directors
 “ are divided into three committees; finance and
 “ home, eight directors; political and military,
 “ seven; revenue, judicial, and legislative, seven;
 “ the duty of each is partly defined by the title;
 “ but there is a committee of secrecy, forming the
 “ cabinet council of the company, consisting of
 “ the chairman, deputy ditto, and senior director;
 “ its functions are defined by Parliament.

“ The business relating to the India government
 “ transacted in England between the Board of
 “ Control and the Court of Directors, is as fol-
 “ lows :—

“ All communications, of whatever nature, and
 “ whether received from abroad, or from parties
 “ in this country, come, in the first instance, to
 “ the secretary’s office, at the East India House,
 “ and are laid by the chairman before the first
 “ court that meets after their receipt. Despatches,
 “ when read or laid before the court, are consi-
 “ dered under reference to the respective com-
 “ mittees and their officers, whose duty it is to
 “ prepare answers, and take the directions of the
 “ chairs upon points connected with them; the
 “ draft is prepared upon an examination of all

“ documents to which the substance has reference,
 “ and submitted to the chairs; it is then brought
 “ before the committee, to whose province the
 “ subject more particularly relates, to be approved
 “ or altered by them, and, on being passed, is laid
 “ before the Court of Directors. After it has
 “ passed the Court of Directors, the draft goes to
 “ the Board of Control, who are empowered to
 “ make any alterations, but required to return it
 “ within a limited time, and with reasons assigned
 “ for the alterations they have made. Previously,
 “ however, to the draft being laid before either
 “ committee by the chairs, experience has sug-
 “ gested the convenience of submitting it to the
 “ president of the board, in the shape of what is
 “ called a previous communication. This is done
 “ in communication between the president and the
 “ chairs, in which stage, alterations, containing
 “ the original views of the president, are made.

“ The draft being returned to the chairman, is
 “ laid by him, either with or without the altera-
 “ tions, as he may see fit, before the committee,
 “ is submitted to the court, and there altered or
 “ approved, as the court may see fit. It is then
 “ officially sent to the board, who make such alte-
 “ rations as they judge expedient, and return it to
 “ the court, with their reasons at large for the
 “ same. Against these alterations the court may
 “ make a representation to the board, who have not
 “ unfrequently modified the alterations on such

“ representation ; but if the board decline to do
 “ so, they state the same to the court, and desire
 “ the draft may be framed into a despatch, and
 “ sent out to India, agreeably to the terms of the
 “ Act of Parliament. In the event of a refusal,
 “ three Judges of the Court of King’s Bench
 “ finally decide as to the legality of the board’s
 “ order.

The same authority speaking about the Board of Control, observes that “ the East India Com-
 “ pany’s Home Government, thus briefly de-
 “ scribed, has been controlled by a ministerial
 “ authority since 1784, which is termed the
 “ Board of Commissioners for the affairs of
 “ India, or more generally the Board of Control ;
 “ it consists of such members of the Privy Council
 “ as His Majesty may be pleased to appoint, of
 “ whom the two principal Secretaries of State, and
 “ the Chancellor of the Exchequer shall always
 “ *ex officio* form three. The President is also
 “ nominated by the crown, is usually a cabinet
 “ minister, and in all changes of administration,
 “ retires from the office together with the salaried
 “ commissioners and secretary. The oath which
 “ the commissioners take, imposes on them the
 “ responsible duty of governing India to the best
 “ of their ability and judgment, as much and as
 “ completely as if there were no executive court
 “ or administrative power. The *controlling* func-
 “ tions of the Board are exercised in revising *all*

“ despatches prepared by the Court of Directors,
 “ and addressed to the government in India ;
 “ *originating* in requiring the court to prepare
 “ despatches on any named subject, and in alter-
 “ ing or revising such despatches as it may deem
 “ fit.”

The interior of the East India House is quite as magnificent as the exterior ; the ground floor is almost entirely appropriated to the use of the Directors, who each have a room. There are also a great many waiting-rooms for those who come on business, or wish to see the Directors. On entering the front door we find ourselves in a hall, the door on the right hand leads us to the proprietor's room, and going through the left hand door we perceive a staircase before us, ascending which, we come to the Museum.

The passage which is at once seen opposite the entrance, going through which and turning to the right, we perceive a noble flight of steps, ascending which, we will find on the first floor the Secretary's office, and the clerks, &c. of this department. The Marine branch is on the second floor, and the Treasury office on the first.

Besides this there are other departments connected with the multifarious business of the honourable company, but so excellent is the internal arrangement, and so much accommodation is there within this edifice, that there is no confusion or people running about here and there,

though containing many hundreds of persons within its walls, every day from nine in the morning till six in the evening ; one would sometimes think it is not at all inhabited, because there are so many passages and windings that extend to every part of the house, that a stranger sometimes in going through does not see a single soul, neither will he be able to find out his way without enquiring of some one he may happen to meet. In the Museum there are a great many curiosities, principally from India, China, and Burmah, consisting of paintings, ivory carved work, and other articles, models, illustrations of vehicles, and conveyances made use of in India, and trophies taken in the battles.

In one there is an extensive collection of stuffed Indian Birds, and beasts, and very beautiful specimens of butterflies and other insects. The library is full of works printed in the English and oriental languages, relating to India ; there are also many Persian manuscripts and Chinese books ; we saw this Museum two or three times, and were very much pleased and interested in viewing things and productions of our own country. This Museum is very liberally thrown open for the public inspection every week, and no gratuity is expected by the person in charge of it. This example is worthy of imitation in many other public places in London. In order to see the Museum on the other days of the week, a Director's order is requisite.

Before taking leave of the India House, we must endeavour to remove an erroneous impression under which many of our fellow brethren in India labour; we think we should be doing great injustice to our own feelings, and fail in duty to our country, did we not touch upon this subject. It is thought in India, that there is a disinclination on the part of the government to give offices of trust and emolument to the natives. We are quite prepared to say, that this is a great mistake, and we could by our own experience as well as what has passed in England before our own eyes, prove that no such feeling is in existence among the Court of Directors, or, we may venture to say, among the members of the several local governments in India; we have been in England a sufficient time to form an opinion on this point; we studied under the patronage and protection of the honourable company, and during the whole time we have been in England, have received from the Honourable Court of Directors, individually and collectively, uniform encouragement, kindness and facility, towards, accomplishing our object, and we can assert that there is every disposition to encourage native talent and genius—to give our countrymen situations of honour and trust, and to promote in every way the welfare of the natives—to prove it, we would point out our cousin Ardaseer Cursetjee, whom the honourable court appointed chief engineer and inspector of the steam foundry, at Bombay, in August last; we

think every native ought to rejoice at this, it will convince them that talent alone is *recognized*, without any regard to dress, colour, or religion.

We therefore assure our friends in India, that if they would only prove themselves capable and qualified for conducting any post of honour and confidence, their services will be cheerfully accepted by the government, and that they will meet with the just reward their conduct may merit.

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CHAPTER XXVIII.

STEAM MANUFACTORIES IN LONDON.

During our sojourn in England we had the pleasure of becoming acquainted through our cousin Ardaseer Cursetjee, to the eminent engineers of London, Messrs. John and Samuel Seawards who are the manufacturers of steam engines particularly those for steam vessels. Our cousin studied the steam engine scientifically in their Foundry, and by the able instructions of these gentlemen he made himself qualified in a short time to carry on the duties of an engineer, and is appointed chief inspector of the Honourable East India Company's steam factory at Bombay.

During our relative's sojourn we often visited this establishment, it is situated on the north bank of the Thames about three miles from London Bridge and nearly opposite to Deptford. It is an extensive establishment, not inferior to any in London, and there are constantly employed upwards of five hundred workmen and boys. The machinery for turning, boring, planning, and other various purposes are worked by a steam

engine ; they are very numerous and of the first rate description. The general arrangements of the shops for the different departments of business are very good, particularly the iron foundry in which large castings can be made with facility. The shop for fitting and erecting the engines previous to their being fixed on board the vessels is sufficiently extensive to receive eight or nine pairs of the largest size at one time, and a very fine smithy containing between twenty and thirty large smiths' forges. There is also a noble wharf attached to the works with a great depth of water alongside, in which steam frigates of 1100 tons burthen have remained during the shipment of the engines and machinery ; on the wharf is fixed a powerful pair of sheers (a particular description of crane with three moveable legs) 80 feet high, capable of lifting the weight of 50 tons.

The boilers, which are made in large and heavy pieces are manufactured at a separate establishment belonging to the same firm, which is fitted with extensive machinery for that purpose.

Messrs. Seaward and Co., have made several improvements in marine engines, the principal of which is, the arrangement by which the moving power of the engine is placed immediately over the cylinder, doing away with the usual cast iron framing sway beams, side rods and cross leads. They are called the "Gorgon Engines" from their being first applied to the "Gorgon" Frigate

in Her Majesty's service fitted with steam power. These engines are much lighter and take up less room than the old plan.

The total or aggregate power they make is about two thousand horses annually besides repairing old engines. The consumption of coals in twelve months is 3000 tons, of iron 2500, of copper 200, and of brass 100 tons. The Factory was established about fifteen years ago, and Messrs. Seaward have during the last ten years made eighty pairs of marine engines, varying from twenty to three hundred and twenty horse power, and we are informed that the wages they pay weekly, is about £800. and the expenses of the establishment, rent and taxes about £9,000. per annum so that the wages, rent and taxes all amount nearly to £50,000. a year.

Messrs. Seaward and Co., have received great patronage from the English Government, who principally employ them in making engines for the steam vessels of the navy ; the whole arrangement of their establishment together with the manner in which it is conducted, and the eminence they have arrived at in the short period of fifteen years reflects great credit upon these gentlemen.

We were favoured with a letter of introduction to the celebrated engineers Messrs. Maudsley and Field, and they very politely conducted us round their magnificent manufactory of steam engines, which is situated a little beyond Westminster

Bridge on the Surrey side of the Thames, it is a very large, and we are told the largest establishment of the kind in London.

But after speaking of the factory of Messrs. Seaward and Co. we will not trouble our readers with any details of it, suffice it to say that its arrangements are nearly the same and the various operations are carried on by the aid of very good steam engines, and they manufacture a great number of land as well as marine engines.

CHAPTER XXIX.

THE ROYAL INSTITUTION.

On the 26th of March, 1841, our kind friend Mr. George Forbes procured tickets for us to attend a lecture at the Royal Institution, Albemarle Street, Piccadilly, that was to be delivered there by a Mr. Goddard on a very interesting subject, *viz.* the application of Daguerreotype to obtain likenesses of living men.

This institution is very respectable indeed, as none but noblemen and gentlemen are allowed to be members of it, who are elected by ballot the first Monday of every month. The members pay six guineas as an admission fee, and an annual payment of five guineas, or sixty guineas in lieu of all payment. The members have the privilege of attending public lectures, the Museum and evening meetings.

At eight o'clock the lecturer entered the theatre of the institution, which is a room fitted with seats one above the other, and a gallery above. The seats were all crowded, and a great many ladies as well

as gentlemen were in the gallery. He first briefly described Monsieur Daguerre's apparatus, and then proceeded with the subject of the lecture.

The method of fixing likenesses on the plate is nearly the same as the Daguerreotype, only that the process is much simplified and the apparatus improved and of a different form than that of M. Daguerre's. The plates require only once polishing with nitric acid and tripoli powder, and they are made so sensitive as to receive an impression in a few seconds on a fine summer's day, and even on a cloudy day by keeping it a longer time in proportion to the diminished quantity of light. We saw him prepare the plate and take the likeness of a bust that was placed therefor the purpose, a powerful oxy-hydrogen light was thrown on its face to embody the shadows on the plate, and within three minutes the image was fixed, the fidelity of which, as well as the effect of light and shade, can never be doubted, from the circumstance of its having been taken without the aid of an artist, neither will it flatter or give a smiling countenance to one who really does not possess it.

The appearance of the picture is very dull, but this discovery will be one of the greatest value to artists, as they can copy it and bring out the nicest effects of light and shade in colour; it will also enable them to take a likeness of a person, who has the photogenic portrait of himself, in half the number of sittings.

This discovery is at present only confined to obtain miniature portraits, as the plates are only 2 inches and a half by 2 inches, but there is not the slightest doubt that its application will be extended to larger size.

We were very much pleased in seeing this institution before our departure from England. The library is a large room, and contains a great number of valuable books, which must have cost a large sum of money.

CHAPTER XXX.

NEWSPAPERS AND PERIODICALS.

WE could not reside so long in England without learning the great importance that is attached by English people to their newspapers. We believe to very many, it is the greatest pleasure they have in life to get the newspaper at their breakfast in the morning, and it is laughable to see how immediately readers of a certain class, adopt the opinions of the daily paper they take.

"The Times says there must be war with America, *and I'm sure its true*," says one. "Why the Chronicle says, that it is not the report of congress, but only of a private committee, and we shall have no war depend upon it," replies his friend. "Look what the Times pays for its foreign expresses," says one.—"I don't believe one word that the Times says," replies his friend; and thus it is, that many confirmed political men act, and put full faith and confidence in their respective papers, and to enter a news-room where a number of newspapers of different sides

of politics, are lying on the table, is to us (who of course have no politics at all) most amusing ; and to read the account of the same meeting described in papers of opposite politics ; they are so completely at variance with each other ; the speakers on their side of the question, *were listened to with profound attention ; their party had by far the largest number present.* When the other paper states, *the speakers on the opposite side were inaudible, and the assemblage very thin,* and so on,—so much for where party leads them.

But as journals of historical facts, as furnishing daily information of whatever is going on in the world, nothing is to be compared with an English newspaper. And the enormous expense of conducting a leading daily paper, is such a sum that would scarcely be credited. In the first instance, to commence a morning paper of importance, to compete with the Times, a capital of upwards of £50,000. is required to be invested ; and as it is always a hazardous affair, it is generally managed by a few associated proprietors, and whenever any very strong new political question is before the public, all the proprietors are called together, and it is by them decided which side of the question their paper is to take, or to use their own form of words, whether they are to write it up or to write it down. This may account for the change which some of the daily papers have made in their politics, and after a little while changed

back again. This line of conduct only proves how improper it is for any one to allow the leading article of any newspaper to actuate them in their movements upon any matter, and we cannot imagine what sort of people they can be who write upon both sides of a question, as it is evident that only one must be approved and dictated by their conscience; the other therefore must be directly against their will and intentions. It is a matter of regret, that the public mind should be excited daily with strong and inflammatory language, and with subtle reasoning, and we cannot help remarking, that men who have been blessed by Providence with such superior abilities as the editors of the newspapers are, should pursue such a course. To them many paths to fame are open, and were they only to write what they *really do think to be right*, their observations would be extremely useful, and instructive to the public, but by such narrow minded proceedings, they forfeit public confidence, and make use of the best of their language and ability, in reviling and finding fault with their fellow brethren.

We saw an article in Chambers' Edinburgh Journal, of the Year 1835, (No. 153), in which was the current expenses of a daily morning newspaper, and as they pledge themselves to its being true, we borrow their calculation. They state there is an editor, a sub-editor, and upon some papers a city editor. From ten to fourteen regular

reporters with salaries; thirty to thirty-five compositors (who set up the type for printing); two readers, two reading boys, who read the copy aloud whilst the others correct the proofs; a master printer, or foreman, machine men and boys, a publisher, and sometimes a sub-publisher, office clerks, to receive advertisements and keep accounts, a porter, errand boys, casual servants, &c. But the actual nature of the expenditure will be best seen by the following statement drawn up by a gentleman formerly connected with the London newspaper press, and whose report may therefore be reckoned pretty accurate. He gives the following as a fair estimate :—

	Per Week.	Per Year.
Principal Editor - -	£21 0 0	£1092 0 0
Second Editor - - -	10 10 0	546 0 0
City Editor - - -	10 10 0	546 0 0
Twelve Reporters, each -	5 5 0	3276 0 0
Two Readers, both - -	5 5 0	273 0 0
Two Reading Boys - -	3 3 0	159 12 0
Publisher - - -	4 4 0	218 8 0
Clerk - - - -	2 2 0	109 4 0
Printer - - - -	4 4 0	218 8 0
Porters and Errand Boys -	4 4 0	218 8 0
Treasurer and Manager -	10 10 0	546 0 0
Compositors, Machine Men, including all the Requisites for Printing, about -	80 0 0	4160 0 0
Circuits 18, each per annum,	20 0 0	360 0 0
Expenses of all kinds, including (French £436 10s.) Postages, Carriages, &c. - - -		546 0 0

	Per Year.
Occasional Reports of Police Offices, Inferior Courts, Inquests, Meet- ings, &c. - - -	546 0 0
Literary Assistance, not included in above, Foreign Correspon- dence, and occasional payment for private information -	1092 0 0
Office Rent, Taxes, Light, Wear and Tear, and Interest on fixed Capital . - -	1092 0 0
	<hr/>
Total	£14999 0 0
	<hr/>

There is reason to believe that this is considered much under the actual outlay of the Times Newspaper: provided a paper depended upon the sale of its newspapers only, it would lose a very considerable sum of money every year. But when a paper has the credit of having a large circulation, a great number of persons advertise therein; and it is these advertisements that repay for the capital and the annual outlay upon these papers, as large sums are paid for inserting these advertisements.

The expense of carrying on an evening paper is not half so much as that of a morning paper, as there is no necessity of employing parliamentary reporters, they taking the reports from the morning papers; and, generally speaking, the evening newspaper is not half the size of the morning ones: consequently they do not expend nearly so

much for printing, and for the other contingent expenses.

There are other papers which are published three times a week only, and they are published by the proprietors of a daily paper; and the same paragraphs that are set up in type for the daily papers answer without any expense for the paper published three times a week, and they only require the care of an individual to select and arrange them, and write a short leading article for it. Some of the weekly papers are got up in the same manner as these three times a week papers. But, on the contrary, some of the weekly newspapers are admirably got up, and their remarks upon passing events are most beautifully written. The public press in England follows the public opinion, or, in other words, it does not govern the minds of the public as it formerly did; yet there is an action and reaction between the both. As most of the London weekly newspapers are Sunday papers, although they are actually printed on the Saturday, they do not reach the great mass of their readers until Sunday, they consequently occupy a great portion of the time that was formerly occupied in religious pursuits. Of the daily morning papers the Times has the greatest circulation. It was for years a Tory paper; it is said to have advocated whig principles in Lord Grey's administration, and at the breaking up of which it became a conservative paper, which it

still remains. The Chronicle has always been a whig newspaper, and upon the Times leaving whig principles in 1834, its circulation increased rapidly : it is now said to be the largest in circulation next to the Times. The Morning Herald is of Conservative principles, and has a large circulation ; it does not go to the expense that the Times and Chronicle do for foreign information. It however has much general local news, and its reports of the police offices and of criminal and other trials are very good. The Morning Post is a Tory paper, and its chief intelligence is about fashionable parties, and little bits of news relative to the nobility and gentry. The Morning Advertiser is a paper that has great circulation in public houses. It belongs to the society called Licensed Victuallers, or in other words " Publicans," and the profits of it go to a fund they have for decayed publicans. It is of liberal principles, and has a good circulation : it is not a very good paper for general information. The Sun which is a Radical paper has the largest circulation of any of the evening newspapers ; and the proprietor is said to pay a large sum for his expresses ; and he adopts the plan of sending a second express edition at a rapid rate, whenever news of importance arrives after he has published his paper, and after the post has left London. He has also recently started a morning edition of the Sun paper. The Standard is a Tory evening newspaper ; it is edited in a

the ~~most~~ ^{most} important manner, and has an immense circulation. It is ~~not~~ ^{not} sent to pay largely for foreign expenses and information. The Globe evening paper is the ministerial paper at present, and has always the ~~most~~ ^{most} correct and most correct information as to what ministers intend to do, and what official appointments are to take place: generally its leading article is an outline of what ministers intend to do upon any question to come before either House of Commons that evening. It has a ~~very~~ ^{very} circulation. The Courier was for many years a Tory, became a Liberal paper supporting the administration, but has turned again, and is now a Conservative.

The three times a week papers—are, the St. James's Chronicle, which is published from the selected paragraphs of the Standard, and, of course, is Conservative; the Evening Mail, which is done in the same way from the Times, and, of course, Tory; and the Evening Chronicle, which is made up from the Morning Chronicle, is a Whig paper. The paper which has the largest circulation among the weekly newspapers, is the Weekly Dispatch, belonging to a Mr. James Harmer, who was an alderman of London, and who would in this year (1841) have been Lord Mayor of London, but he employs, as a constant writer to his paper, an individual who signs himself Publicola, who, in his weekly addresses, made use of language so exciting, and calling upon the

lower classes to upset all the established institutions, and, in fact, using arguments of such a nature, that, if carried out, monarchy would cease, and universal discord be dominant; that when Alderman Harmer was put in nomination for Lord Mayor of London, he was opposed openly and avowedly for being proprietor of a paper in which articles so inflammatory were inserted. He was not allowed to be Lord Mayor, and he then threw up his alderman's gown, and became a private individual, still continuing to be the proprietor of his profitable Weekly Dispatch, and still allowing Publicola to write his weekly letter, but in a modified tone. We hardly know what politics to call the Weekly Dispatch. It is neither Tory nor Conservative, but does more injury to the cause it professes to support (that is Liberalism) than any paper published. It alarms the timid, serves its opponents to point at, and does more to retard the progress of Reform than any print in England.

The Examiner and Spectator are both liberal weekly papers admirably written; but the former goes quite to the extreme of Radicalism.

Bell's Weekly Messenger is a quiet, useful paper, of large circulation, moderate Conservative politics, and well written.

The Age and the Satirist are papers (the first a Tory, the second a Liberal) that indulge so much in obscene paragraphs and personalities, that no

respectable families or decent people take in such prints. There is much wit in both of them, but of that nature as to raise a blush, and we think them disgraceful to the period they are published in.

The Observer is a paper of general information, large circulation, and admirably got up; it is of Whig principles. It is the only weekly newspaper that brings its intelligence up to Saturday at midnight.

Bell's Life in London, and the Sunday Times, are sporting papers, giving an account of horse-races, dog-fights, men-fights, and all that sort of thing; they are to be met with in the hands of horse betting people, and sporting public houses.

The Atlas is a very large Sunday paper, and is very excellent for the great variety of news it contains. There are very many more that we know but little about, and in addition to these, there is scarcely a large town in the kingdom but what publishes one or more weekly papers, all of which, of course, are supported by the political parties whose side is taken up by them.

There is one great advantage, that people can do as we have done; go to places where, for a few pence, they can read all sides of the question, and thus judge for themselves. The only mischief is, that where dangerous language is used to the humbler class, they are too apt to think that every grievance that is spoken of is real; and we all of

us know, that it is much easier to excite people, and to make them discontented and unhappy, than it is afterwards to keep them quiet and to assure them that they have been deceived, and are not in so bad a situation as newspapers would make them believe. In a free happy country like England, newspapers do much to keep alive the spirit of liberty. No man, let his station in society be what it may, can do much harm in his neighbourhood before it gets into the public prints; and if he is oppressing his poorer neighbours, or setting public decency at defiance, he is sure to be roughly handled in the newspapers; that if he does not for decency's sake quit his acts of outrage, it induces persons to come forward to investigate the case, and, by public subscription, to uphold the sufferer, and to shut out the offender beyond the pale of respectable society.

There is no good without a corresponding evil; low-minded men anonymously attack the character and feelings of those whom they have not the courage openly to attack, by putting offensive paragraphs in the papers. But it would be a matter of regret that the acts of a few base men should ever shackle the liberty of the press, which has done, and is doing so much to enlighten and secure the freedom of mankind.

In addition to the *host* of newspapers annually printed in England, Ireland, Scotland, and Wales, there are multitudes of what are called periodicals,

that is, literary works that appear annually, quarterly, monthly, or weekly, and to commence with the most ancient of the annuals; the annual *Register* has been in existence for more than half a century, and contains historical records of the prominent events of the past year, as relates to its political movements, criminal trials, and domestic events, and a slight review, and extract from books published in the year; its price is sixteen shillings. Within the last twenty years many beautiful annuals, illustrated with first-rate engravings, have made their appearance, and the tales and poetry, in most of them, are contributed by the first writers of the day; they are elegantly bound, either in silk, morocco, or russia leather, and are sold, when first published, at from £1. 1s. to 10s. 6d. each, according to the style in which they are got up. Among the earliest and the best, we would mention the "Forget me Not" and the "Keepsake," and they have been followed by many others of superlative beauty; the "Landscape Annual," the "Book of Beauty," the "Drawing Room Scrap Book," and, indeed, by such a numerous class of this description, that we cannot say more of them, than that the pictures in many of them are perfect gems, and the production of these books must have done much to improve and bring to perfection the art of engraving in England. About the year 1802, Mr. Brougham, Erskine, Birkbeck, and Jeffery, then young men,

commenced a review, publishing it about once in three months, called the "Edinburgh Review;" and though it only professed to review books, yet, in fact, it became the medium through which some of the most admirable essays in the English language have been written and placed before the public, but as it took a strong political side of the question, all the articles being strongly tinctured with liberalism, the tory party in 1809 started in opposition the Quarterly Review; Mr. William Gifford was its first editor, and we believe it is now edited by Mr. Lockhart, the son-in-law of the late Sir Walter Scott, whose salary we are told is £1,500. per annum. Many first-rate men, including Canning, Lord Dudley and Ward, Lord Francis Egerton, &c. have written for this work, and the articles in the Quarterly are quite as masterly written as those in the Edinburgh. £100. and upwards are not unfrequently paid for each of the articles in the Quarterly, the circulation of which is said to be about ten thousand. They both of them continue most strongly to advocate their political opinions, and when any strong political question is agitating the public mind, under the pretence of reviewing some little pamphlet upon the question, they say all that can be said for or against the measure. And in addition to this, every new book that is worth notice is reviewed by them so fully, that many persons who have not much leisure, instead of reading the books

read the reviews, and they obtain general information without much trouble. There is another review also published every three months called the *Westminster Review*, which adopts the same course as the two others, but the writers are radicals and all its articles are for great and immediate changes in the mode of government. These three sell at 6s. each. There are also quarterly publications of a scientific nature, such as *Quarterly Journal of Science*, and *Quarterly Agricultural Journal*, 6s. Of monthly publications there are several, most of which have some well written original articles on improving subjects, with pleasing tales, a little poetry, and all of them nearly profess to review books published within the past month. The two highest priced magazines are the *New Monthly Magazine*, 3s. 6d. per month, and the *Metropolitan*, 3s. 6d., both of which are conducted at great expense, and have capital original tales. *Blackwood's Edinburgh Magazine*, 2s. 6d. per month, and *Fraser's Magazine* have always some clever articles, but of too grave a class for the generality of magazine readers. *Bentley's Miscellany*, 2s. 6d. per month, has always some laughable stories in prose and poetry. *Tait's Magazine*, 1s. per month, is well written, but most of the articles dry for magazine readers. *Naval and Military Journal*, 2s. 6d. per month, is confined to the two services, with occasional interesting tales. The *Polytechnic Journal* is connected with im-

provements in machinery. Gentleman's Magazine, 2s. 6d. per month, confines itself pretty much to describing antiquities, as buildings, coins, old writings, &c. There are three or four monthly publications connected with flowers; Harrison's Floricultural Cabinet, only 6d. per month, gives tolerable good pictures of new flowers, with full directions for cultivating them; and the Florist's Journal, also 6d. per month, does the same thing. There are other periodicals devoted to particular purposes: the Asiatic Journal, devoted to India; it is a very interesting work. The East India Magazine is also devoted to India; and the Colonial Magazine to India and to all the British colonies: this periodical is most ably conducted, and is admirably calculated to develop the resources of the colonies, and contains genuine information upon all subjects. It is impossible for us to particularize half the good works of these descriptions published; we can only speak of those we have met with, and of course of them our descriptions must be very imperfect; but as we would wish our countrymen to know all we can communicate about England, we have described to the best of our humble means these very useful publications.

When we come to weekly publications, we know not where to begin, so many in number, and most of them so useful and at such low prices that *every body* can afford to purchase some of them.

We believe the oldest weekly periodical is the *Mirror*, it is 2*d.* per week, and has one or two pictures, and several pages of very closely printed amusing little pieces of poetry and prose. There is then the *Literary Gazette*, 8*d.*, and the *Athenæum*, 4*d.*, both reviews of new works, and are well conducted. We next come to the *Penny Magazine*; this was first published on the 31st March 1832 and for one penny eight pages of really useful practical matter and free from politics is printed and distributed; Lord Brougham, Lord John Russell and a numerous committee of gentlemen first set this magazine in circulation and it has now a very large sale, many thousands of them on the Saturday finding their way to the remotest part of the united kingdom; every number has two or more first rate wood engravings. It could not by any means be sold so cheap did not the great number required enable the committee to transfer the wood cuts as well as the type to stereotype plates, and the magazines are in reality not printed from the wood cuts and type but from these plates. There is also a penny *Cyclopedia* of which a number is delivered every Saturday, for one penny and a capital book of reference it is. There is also by the same committee published the *Library of useful knowledge* in sixpenny numbers, the first number of which "The objects, advantages, and pleasures of science" was written by Lord Brougham, and if he had

never written any other work, nor made a single speech, nor contributed in any way to the diffusion of knowledge, this *one pamphlet* would have handed his name down to posterity as one of the cleverest men of his age ; soon after the penny magazine was started Messrs. William and Robert Chambers started a weekly periodical for three half pence per week, with eight pages of three columns each printed very small called Chambers' Edinburgh Journal, and filled with useful information and most amusive matter ; we consider it the most talented, and the best, periodical in the kingdom. Its advice to all classes is such as, if followed, would make men wise and happy. It endeavours to make the working classes fond of reading, and all its tales and observations point out the happiness which results from virtuous actions. Messrs. Chambers also publish weekly, price three halfpence, Chambers' Information for the People, which treats upon every known science, and gives a valuable treatise, complete in itself, upon each branch of science, for only three halfpence. This is an invaluable work.

The Saturday Magazine, price only one penny, conducted by a committee, is of the same size, and has about the same number of engravings as the Penny Magazine, and has a very extensive sale ; it is admirably conducted, and has much useful information in it. We forgot to mention, when speaking of the monthly publications, that

three or four of the different sects of religion have their sixpenny monthly magazine ; for instance, the Evangelical, the Methodist, and the Baptist.

We have seen several numbers of a very good weekly publication two pence per week called London Saturday Journal. There were two of them, the other was called Grant's London Journal but at the commencement of 1841, they agreed to unite into one, and it is now called London Saturday Journal ; this is a work with a good deal of information and many original articles upon existing customs, &c. There is also a very clever work, the English Journal, three half-pence per week with sixteen pages of closely printed information and which we think very good. In addition to these there are several at one penny per week, such as the Odd Fellow, Penny Satirist and others which no doubt sell tolerably well, as we see them weekly at the pamphlet shops. With this host of varied information it would indeed be singular if we did not find among the humble classes in England many practical well informed men. We do conceive it to be a great comfort to be able to procure so much and so really valuable information in a cheap form ; oh ! happy England where the poorest of men have placed within their reach so pleasing a recreation as this afforded by cheap periodicals. Where every human being may learn the history and use of every thing that meets his eye or his ear, and who by his own fireside in wet

or cold weather can amuse himself by perusing good and useful books.

We have now given a correct account of the newspapers and periodicals of London which of all the literary publications are the most useful. They are free from all sorts of politics and the information contained in them is calculated to diffuse knowledge, and in consequence of their cheapness, they are admirably adapted for the humbler class, thus providing poor as well as rich with works of arts and sciences, and the good these publications have done to society manifests itself from the rapid increase that has taken place within the last ten years in their number and great circulation.

We have since writing the above received two numbers of a periodical called 'Vidya Sagur' (river of knowledge) conducted in Goozrattee language at Bombay, by Nowrojee Furdoonjee, formerly a student of the Native Education Society and now Assistant Professor to the College of Elphinstone Native Education Institution. It treats upon the Elementary Principles of Popular Arts and Sciences, History, and other miscellaneous subjects, we have much rejoiced to see it, and we strongly and earnestly recommend our countrymen to give all possible support to the work. It is the first, the very first of its kind that has ever appeared in the Goozrattee language, and the laudable purpose the talented editor has in view,

that of improving his countrymen, is well deserving of encouragement from the inhabitants of Bombay; he has indeed paved the way, for this advancement and we hope that he will meet with due support.

We are finally of opinion that by giving due encouragement to such literary productions our countrymen in a few years will perceive the benefit that would result from it, and that the progress they will have made in literature in a short period will exceed their most sanguine expectations.

In conclusion we sincerely congratulate the editor in having been the first to have projected and carried into effect this praiseworthy object, it reflects the highest credit on him and we trust that he will long live to have the satisfaction of seeing the beneficial result of his exertions, and of observing others imitate his example.

CHAPTER XXXI.

TOUR TO THE NAVAL ARSENALS AND PRINCIPAL
SEAPORTS.

It was suggested by many of our friends that we should, before quitting England, visit some of the manufacturing towns, and the Royal Naval Arsenals, which have, for years, been the pride of the English people; the noble specimens of human ingenuity and of naval architecture that are here produced are, and have been, the chief means of establishing the maritime supremacy of the British over every other nation on the surface of the globe.

We were therefore desirous to see these great national establishments, and stupendous works of mechanical skill, and the commercial towns, the names and celebrity of which we had heard and read a great deal about; in order that we might gain some more professional knowledge, and also to convey to our countrymen a faint idea of a country whose children have governed them more than a century past; whose arms have been attended with success unparalleled and unprece-

dented in the annals of nations; whose perseverance and industry have raised them from a state of rudeness and barbarism, to the highest pitch of civilization; whose superiority in military skill, naval tactics, and mechanical and general knowledge has filled the neighbouring powers with admiration and envy; and lastly, whose inexhaustible resources of those two most valuable articles, iron and coals, have been the means of undertaking and accomplishing the boldest projects that ever entered the human breast.

It was with these intentions that we were determined to take a tour to these places, in the month of April 1840, which is generally the best time of the year, the days being fourteen hours long, and the weather very mild; and while we were thinking to do so, orders were forwarded to Chatham to launch the frigate *Mæander* of 46 guns; this being the first launch since our entering the yard, it was of importance for us to witness the preparations of fitting the launching apparatus, and to note down every detail and minutiae of it; we therefore gave up the idea till after the launch which took place on the 5th of May, and the account of which will be found in another part of this work.

After the launch, we found that the steamer *Ardent*, which was begun a few weeks since, was complete in frame, and was progressing very rapidly in order to be completed in July next;

we also knew that the keel of the steamer, Polyphemus was to be laid on the slip from which the frigate was just launched, and at the same time, it was said, the London of ninety-two guns would be launched in August ; and as to be acquainted with the construction and repairs of steam vessels was our primary object, we did not deem it prudent to lose such precious opportunities of watching the building of two steamers from first to last, and the launching preparations of a second rate line of battle ship ; we consequently deferred our tour till September. The London and the Polyphemus, however, were launched on the 29th of September, and the Ardent was slowly advancing towards completion. In the meantime we employed ourselves in preparing some designs of steam vessels, and witnessing the works of the two building in the yard.

We had previously obtained permission from the Honourable Court, and were now preparing for our journey, when, to our great dismay, one of the domestics became very ill ; and we had the mortification, on the day of the launch, to see the other and our friend share the same misfortune ; they all were attacked with severe bowel complaints, which were then prevalent in the neighbourhood.

The following was our new year's day, which we were in the hope of enjoying, as well as we could, in a strange country ; but this unforeseen circumstance marred all our pleasures, and, in-

stead of festivity and mirth, which we always have on the occasion, our house had more the appearance of an hospital. We two were left to manage our meals as well as we could, and this we could but ill perform ; in addition to which we had to look after the invalids, which indeed we never before did in our lives. This misfortune put us strongly in mind of home, and we could not help thinking how comfortable and happy we should have been, if we had been in Bombay that day, and how much we might have enjoyed it in the bosom of our families ; however we contented ourselves with the anticipation of being at home that day twelve month.

It was on the 12th of October that our friend and domestics having partially recovered, we left Chatham for our long expected tour, and proceeded to London. Having paid our respects to the chairman, the secretary, and other friends at the East India House, we were now prepared to leave town for Portsmouth, which was the first place we intended to visit.

Before we quitted town we were favoured with three official letters of introduction from the East India House, viz. : to Robert Napier, Esq. of Glasgow, engineer, to Messrs. Forrester and Co. engineers, of Liverpool, and — Laird, Esq. the celebrated iron steam-boat builder, at Liverpool.

We must not omit to mention that the Lords Commissioners of the Admiralty not only gave us

permission through the Honourable the Court of Directors to inspect the dock yards, but Sir Charles Adams gave us letters to the Admiral Superintendents of the yards, from whom we received great kindness, and we here beg to offer our sincere acknowledgments to them for the facility they afforded us in gaining information in the establishments under their controul.

Having, by the 15th of October, procured letters of introduction from our friends in London, the following was the day we fixed upon for leaving London by the Southampton railway; it was too late in the season, winter had already set in, the country had lost its beauty in a great degree, and the days were getting shorter; however, from the unavoidable circumstances which detained us, we hoped to enjoy our tour as much as we could, and to collect as much information as time would permit us. We proceeded to the railway station on the morning of the 16th, at ten o'clock, and took our seats. The fare from London to Southampton for the first class is twenty shillings for ladies and gentlemen, and thirteen shillings for servants.

The London station is situated a little above Vauxhall bridge, at a place called Nine Elms; it is a large but plain building, with offices for clerks, and waiting rooms for passengers, conveniently fitted up. The locomotive engine, and the carriages for passengers were nearly of the same

description as those of the "Great Western Railway;" the line terminates at the beach of Southampton waters.

We started exactly at eleven o'clock, and arrived at Southampton at a quarter past two in the afternoon; thus we travelled a distance of nearly seventy-seven miles in three hours and a quarter, including the stoppages at nearly a dozen places, for taking supplies of coals and water, as well as to leave or take up passengers, these are called intermediate stations, where small suitable houses are built for the travellers who have to wait the arrival of the trains. The capital invested in this undertaking is the sum of one million eight hundred thousand pounds, or eighteen millions of rupees, and the weekly income is said to be about three thousand pounds; this sum, we understand, exceeded the expectations of the proprietors. This railroad approaches near the British channel, and it gives the town of Southampton a commercial importance. Large docks are constructing there for the shipping interests, and it is thought, that vessels from the westward will terminate their voyages at Southampton in preference of going to the Thames through the strait of Dover, which is attended with great trouble and danger, in consequence of the crowded state of that river, and the daily increasing trade of the greatest commercial mart—the port of London—at the same time the conveyance of merchandize to the me-

tropolis by the railway will be, it is calculated, less expensive than vessels going with their cargo to the Thames.

Southampton is situated on the southern coast of England, with a capacious harbour, where a great number of ships may ride in safety, in consequence of the harbour being sheltered from winds.

The town rises gradually from the margin of the water, and has a very good appearance. The port carries on a considerable import trade in wine, fruit, iron, hemp, timber, tar, and pitch, from different parts of Europe. A coasting trade is also carried on with Wales and Newcastle.

Immediately on our arrival, we hastened to the steam pier to join the Portsmouth steamer, but to our very great disappointment, she had left a few minutes before, and there was not any more to leave that day; we were therefore forced to proceed by the Gosport coach, which was to leave at four.

In the meantime we took some refreshments at the Vine Inn, and then took a walk to the High Street, which is the principal; it is a fine broad street, with rows of good houses on both sides, and nearly three quarters of a mile in length; the town is well paved, and lighted with gas, and the shops are well furnished with goods.

We ascertained the population to be about twenty thousand, including the suburbs. We

had no time to see any of the curiosities and objects of attraction; but we were told, it contains an exhibition of paintings, a literary institution, libraries and reading rooms, assembly rooms, a theatre, &c., for the relaxation of the inhabitants and the enjoyment of visitors.

The landing pier is constructed of wood, about nine hundred feet in length, for the convenience of passengers to and from the Isle of Wight, Portsmouth, and Plymouth.

The steamers of the Oriental Steam Company start from Southampton every month, with the Indian mails for Alexandria.

We reached Gosport at half past six in the evening; the distance was only sixteen miles, which was found much more fatiguing compared with the seventy-seven miles by the railway.

We had to cross the harbour to Portsmouth; it was very dark and rainy, yet the dock-yard was pointed out to us; there was also in the harbour the largest ship in the world, the "Queen," and the "Victory," which once carried that gallant and immortal British Admiral "Nelson," who fought the battle of Trafalgar during the last French war; the ship is kept in excellent order, and is preserved for the commemoration of that splendid victory, the anniversary of which was on the 15th of October, on which day she was decorated with wreaths of flowers, and a ball and an entertainment was given on board this favourite

ship. We subsequently saw the motto of Lord Nelson, "England expects every man to do his duty," marked, or painted conspicuously between the upper and middle cheek-rails of the head of the vessel; and many of the veteran sailors, who are now watermen at Portsmouth, seemed to take a great delight in relating the achievements at Trafalgar, and which they called the "glorious day." We were, indeed, gratified to see so much respect paid to a warrior who sacrificed his life for the good of his King and country, and whose services were not yet forgotten by the nation, from the circumstance of the ship being held up as a monument.

On our landing at the Common hard, we went to our friend, Mr. John Fincham, who was kind enough to take us to our quarters, which he had engaged for us in a beautiful part of the town of Portsea, called St. George's Square.

Our next object was, on the following morning, to go to the dock-yard, and having delivered the letters we had to the admiral, superintendent, and the several professional gentlemen, we had the opportunity of satisfying our curiosity in every way during our residence of twelve days. We saw the dock-yard, Haslar Hospital, the victualling yard, where ship biscuits are manufactured by steam, and where all provisions and spirits are kept for the navy, of which we shall endeavour to give a brief description to our readers; we have

particularly refrained, as much as we could, from making use of technical terms, in order to make it interesting to the general reader.

PORTSMOUTH DOCK YARD is the largest and the most extensive of all the naval arsenals of Great Britain, it occupies an area of one hundred and ten acres of ground, and has the best means of fitting out a great many ships at once in time of emergency.

The storehouses in this dock yard are very large, and replete with different sorts of stores, and the whole is very systematically arranged, and proper persons are placed to facilitate the equipment of ships. The entrance into this dock yard is through a lofty gateway, but not very inviting; but the numerous buildings for the accommodation of the officers, and other branches of this magnificent arsenal, fills a stranger with admiration. The great basin contains an area of thirty-three thousand square yards, and is capable of receiving six line of battle ships at any time from the harbour. In addition to which, the basin also communicates with four dry docks, all large enough to admit first rates. On one side of it are erected sheers for masting the largest vessels.

There is a double dock for frigates, and the covered building slips are all very fine; they were all in repairs when we were at Portsmouth.

In this dock yard is the wonderful block ma-

chinery invented by Mr. Brunel, who offered his services to construct the same for the French government and the United States of America, without success ; but the British government availed themselves of it, and caused it to be done, according to his design, in the year 1800, it is the only one of the kind in Europe. Blocks of all sizes are manufactured here, from the first process of cutting the wood, up to the completion of the block, done by the machinery. The rapidity and precision with which the operations of boring, mortising, scoring, &c., are performed, is truly astonishing ; ten blocks of four inches are manufactured in the short space of five minutes. The shives for the blocks are also cut, turned, the brass bushes let in, and polished, in less than two minutes. The iron pins which pass through the shives are wrought and turned, when they are put between three pieces of iron, so contrived as to go round the pin, in order that it may be polished ; but at the same time they exert a pressure of more than a ton on all parts of the pin, by which its quality is put to the test, as those of inferior make were sure to split in two by this enormous pressure acting against them.

The whole of the machinery was made by Mr. Maudsley the engineer, and is put in motion by a thirty-horse power engine. A duplicate of the block machinery is kept in readiness at Chatham

yard, in case of any derangement taking place with the original.

In addition to this, copper sheets and metal sheathing nails are also manufactured for the service of the navy at this yard, the former works, however, were not in operation when we were there. Iron and copper bolts are also made here, and the process is very simple. A quantity of red hot iron is presented to two large iron rollers, which revolve round their own axes, having graduated grooves, either semi-circular or rectangular; these rollers, therefore, when brought in contact with each other present sections either of a series of complete circles or squares, through which the iron is successively passed till it is reduced to the size required. Copper being a more pliable metal than iron is first cast into thick pieces of certain weight, and passed through the grooves in a cold state.

The mast and rigging houses are upon extensive scales. The rope house is of a great length and four stories high, on the lower floor of which is the machinery for making large cables, the three others are used for the manufacture of cordage and twine.

We here saw the "Imaum" 74 gun ship, which was built at Bombay for his Highness the Imaum of Muscat, who made her a present to King William the Fourth.

The worthy master shipwright of the yard, Richard Blake, Esq., was kind enough to show us the model room in which very many beautiful models principally of his own inventions are deposited, many of them were calculated to economize the conversion of timber for building ships, with which we were very much gratified.

There is a naval college at Portsmouth yard for seventy students; thirty, the sons of commissioned officers in the navy, pay in proportion to their rank for board, clothing and education; and forty sons of noblemen and gentlemen, who pay £120. per year, and at the end of two years if the students are qualified they are appointed midshipmen in the navy. There is a semaphore here by which intelligence can be conveyed to the Admiralty in London in a few minutes. A school of naval architecture for rearing respectable young men as theoretical and practical ship builders, was established in this dock yard in 1809, and our kind friend John Fincham, Esq., to whom we owe so much for his kind attention was the instructor here for many years. It was found, that more young men were here produced qualified for shipwright officers than situations could be found for, and the system has been given up for the last ten years.

Portsmouth and Portsea are both enclosed with strong and extensive fortifications, the latter is a more modern town, but irregularly built; Ports-

mouth contains a mechanics institution, which is a great source of amusement to many of the mechanics in the yard who wish to combine recreation with instruction. The principal street, which almost in every country town in England is called High Street, is very wide and regular, and has a great many shops well supplied with goods of every kind. A steam bridge plies between Portsmouth and Gosport every quarter of an hour, besides which a great many boats are always in readiness at that part of Portsea called the Common hard, to convey people to and from the shore to the ships of which there is always a large number lying in the harbour, principally of the navy, and merchant men which touch at Portsmouth in their way to or from the port of London.

The boatmen here are apt to take great advantage of strangers, by demanding more than they ought to have, but they have with them a book given by proper authorities in which all the established fares to the different places are written, and the stranger must ask to see the book whenever he thinks himself overcharged, as they are liable to punishment if they hesitate to produce it, or demand more than the book directs. Portsmouth Harbour is said to be one of the finest in England; it is sheltered from the winds, and is capable of containing almost the whole of the British navy. The entrance to the mouth of it is nearly two miles in width, and the celebrated roadstead,

called Spithead, which lies between the coast of Hampshire, and the Isle of Wight, is denominated by sailors "the King's bedchamber," on account of its capaciousness, and the safety with which ships may anchor here.

We saw nothing remarkable in Portsmouth and Portsea, except the Dockyard and the fortifications. The trade here principally consists of cattle from the Isle of Wight and West of England. Irish corn is also brought hither, and wine is sometimes imported direct from the continent of Europe, but it has considerably declined since the cessation of the last French war.

The town of Gosport is situated on the west side of Portsmouth harbour, and it carried on considerable retail trade at the time of the late war. The population is about 7000; but the streets are narrow and irregular, and the houses are small and without any architectural beauty.

Gosport, however, is much benefitted by the removal of the victualling yard to it from Portsmouth, because hundreds of people find employment in this establishment. A large quantity of provisions are here deposited for supplying the ships in the navy.

This establishment is also called the Royal Clarence yard, and here ship biscuits for the whole royal navy are manufactured by steam; the several processes for making them are carried on entirely by steam, and the rapidity and precision with

which the biscuits are made by the aid of the machinery is very astonishing.

The first process is the mixing of flour and water into what is called dough; this is done by putting a quantity of flour into a cylinder of about 5 feet in length and 3 feet in diameter, and the water is supplied from a cistern close to the cylinder, the quantity being regulated by a gauge. The cylinder is divided into two parts, so that when the upper half is removed, the other part forms a trough from which the dough is easily removed. A shaft armed with knives passes through the cylinder and put in motion by the engine, mixes the meal and water, and produces five hundred weight of dough in two minutes. The dough is afterwards taken to the breaking machine, that is two large and heavy rollers moving backwards and forwards, which pass very quickly over the dough and reduce it to one uniform consistency and thickness. It is then cut into small pieces preparatory to being rolled to the thickness of the biscuit. The latter process is carried on by placing the pieces on a board of 3 feet in width and 6 feet in length, and which by means of a series of friction rollers are reduced to the thickness of the biscuits, and expanded into a sheet or square of nearly the same dimensions as the table. This sheet is now brought under a stamping press, at the lower part of which a series of knives are so placed as to stamp but not separate the sheet

into about forty hexagonal biscuits, which are then removed into large ovens to be baked. As soon as the biscuits are baked, they are stowed away into a large room over the stoves, which is always well aired, in order that they may be thoroughly dried, when they are filled into bags containing one hundred and twelve pounds of biscuits, ready to be supplied to the ships.

Before the erection of the machinery, the biscuits were made by manual labour, and a great inconvenience was experienced in insuring a sufficient and timely supply in cases of emergency. Here the biscuits are manufactured at the rate of $5\frac{1}{4}d.$ per hundred weight ! There are similar machinery and bakehouses at Deptford and Plymouth, and these with the one at Gosport will produce annually upwards of seven thousand tons of biscuits, which quantity, if made by hand, would cost about $20d.$ per hundred weight ; it will therefore be seen that the machinery saves a large amount of money to the Government.

We afterwards saw the store warehouses, they were very large buildings, some of them 500 feet in length, in which were deposited an enormous quantity of salt beef, ham, chocolate, casks of rum, water-tanks and such other articles for the navy ; it took us nearly two hours to inspect the whole, and we were very much gratified in seeing it, but especially the machinery.

Near the town of Gosport is the well known

Haslar Hospital, for the sick and wounded marines and seamen. The building consists of a front more than 550 feet in length, and wings of nearly the same dimensions. It is a royal endowment, and is capable of containing two thousand patients. The hospital is surrounded with high walls, within which are inclosed residences for the officers, surgeons, &c.; there is also a very good anatomical museum. We had a letter from our friend Mr. Rice to Dr. Richardson, of Haslar Hospital; we received much kindness from him and his family, and we had the pleasure of spending a very agreeable evening with them. We saw some of the wards and the museum in the hospital, but they were nearly the same as those in Guy's Hospital, which we have described elsewhere.

On the 29th of October we left Portsmouth at ten in the morning by the Brunswick steamer, a more miserable and uncomfortable steam-boat than her we never saw during our entire sojourn in England; she is an old vessel, and her engines very much out of order. The accommodations are, if we may use the term, very unprofessionally planned, as there is no bulkhead or even screen to detach the main saloon from the bed places, it is in consequence very unpleasant for all passengers; this plan would do very well where the trip is only for a few hours, but where the passengers have to remain the night on board, the

berths ought to be separated from the saloon in order to make them private. And with all this imperfection she was a very dull sailer, and very uneasy in her motions. We arrived at Plymouth in twenty-four hours, the distance being only about 130 miles, so that with a powerful and well-constructed vessel the trip can with ease be performed in twelve or fourteen hours. We were told that she was to be repaired very shortly; we think she ought to have been condemned, and a new vessel substituted in her stead. The passage-money for the after cabin was 25*s.*, and the fore cabin 15*s.*

We arrived at Southampton in two hours, and having taken some more passengers which came from London by the railway train, as well as a carriage, a pair of horses, and about fifty large packages belonging to the Earl of Brownlow, we started again at three o'clock. At six next morning we reached Torquay, where we landed the things belonging to the above nobleman, and proceeded onwards. We had just time to land and look about a little. Torquay is situated on the coast of Devonshire, and from its lonely position, it is a very dear place. The houses appeared to us to be very neat, many of them standing on an eminence overlooking the sea. It is a watering place in summer; many fashionable people from the west of England principally resort here for the benefit of the salt baths. We sailed all along

the coast of Devonshire, from Torquay to Plymouth; the cliffs are very bold, perpendicular, and difficult of access. The county of Devonshire is considered one of the most picturesque in England. The harbour is called the Hamoaze, and the view on entering it is remarkably fine. The Drake Islands, situated in the centre of the harbour, Mount Edgecombe, the seat of Lord Mount Edgecombe on the left, the victualling office, which is a modern work, consisting of a beautiful wharf, and capacious and lofty storehouses on the right, together with that gigantic work, the breakwater, give a beautiful and varied effect. Mount Edgecombe is a small mount covered with fine shady trees, and affords to the people of Plymouth and Devonport one of the most delightful walks. We landed at the place called Admiral's Stairs, and took our quarters at a lodging-house in George Street, which is a very quiet and respectable street in Devonport, and a great many lodgings are always to be had here, as there is few houses that are not intended for the accommodation of the strangers. We, immediately after dinner, went and paid our respects to the admiral superintendent, and the master shipwrights of the yard. Admiral Warren very kindly gave directions that every facility should be afforded us, and we here beg to convey our grateful sentiments to him and the worthy master shipwright, T. F. Hawkes, Esq., together with all

the other officers of the yard for the polite attention we received from them during our stay of seven days at Plymouth.

The towns of Devonport and Plymouth are much superior to Portsmouth and Portsea. They are regular, very well paved, and the houses are nearly all built of limestone with which the county of Devonshire abounds. After the establishment of the dock yard at Plymouth which is situated about a mile from it, the neighbourhood of the dock yard was occupied by houses of those that were employed there and so rapidly did it, improve, that in a short time it became a small town, and was called Plymouth Dock. In the year 1824, the inhabitants, proud of the rapid progress they had made in a comparatively short period and knowing the importance of the town, applied for and received permission from King George the Fourth to call it Devonport. And a monument has been erected in Carr Street by the inhabitants in honour of this event.

Near the monument is a Town Hall, erected about twenty years ago, it is a fine building with a handsome portico in the front and is used for public meetings.

Plymouth Dock yard which should now be called Devonport Dock Yard, stands on the eastern bank of the Hamoaze and is one of the principal naval arsenals of England. The entrance to it is through a large and handsome gateway, at

the bottom of Fore Street, which is the principal one in Devonport. It is very wide and well lighted with gas, and has an imposing appearance from the Dock Yard gate.

The appearance of the Dock Yard at the entrance is remarkably fine, and one would hardly suppose that it is a busy place such as a dock yard always is, no blows of hammers or no confused noise is heard here, neither do we see the dock and ships or persons moving about, or any sort of material used in shipbuilding purposes, on the contrary we see an extensive and wide avenue in the front, the warden's house on the right, and the dock chapel, and the guard room on the same side. On the left hand is a small piece of ground containing a few flower plants and a fountain, and a few strangers or visitors walking here and there during the working hours of the yard.

This part is also kept remarkably clean and free from chips or dirt, so that it presents a scene far different from a naval arsenal.

Going through this avenue and turning to the left we see a long range of building which is appropriated to the residence of the senior officers; the Admiral's house is in the middle part and is easily distinguished from the rest by its external beauty, and largeness, the other houses are also very commodious and a beautiful terrace extends along the front of this building at the end of which is the Admiral superintendent's office.

The Dock Yard contains an area of 70 acres, and has magnificent store houses, and other buildings suitable to the importance of a great naval arsenal. The new north dock was constructed in the year 1789, it is 285 feet in length, 85 feet wide and 29 feet deep, the smithy is situated near this dock, and contains upwards of forty forges, in the front of it is a wharf on which a great number of anchors are kept.

In addition to these there is a double dock called the north dock, and a third one which was built in the reign of William the Third, and now used for repairs of frigates.

The building slips are very fine and covered over with beautiful roofs. We were here greatly pleased to see the "Hindoostan" building all of Teak, and there are also two new vessels building, on the plan of the present surveyor Sir William Symonds, these vessels will be the largest second rates in the world, and will carry ninety guns on two decks.

The rigging house is a fine building it is three stories high, and four hundred and eighty feet in length, where immense quantity of rigging is kept in readiness for fitting out ships.

The Rope house is 400 yards long, where cables and cordage are manufactured the same as at Chatham and Portsmouth. There are also other necessary workshops, such as bricklayer, plumber, glazier, joiner, &c.

A steam engine is also erected to drain the docks, and new saw mills have very lately been introduced: we may as well state here that the Admiralty is said to have come to the determination of erecting sawmills in all the royal dock yards.

The mould loft in the dockyard, is large, though the floor is not quite so good as in Chatham yard: but the operation of laying off ships, and making the moulds or patterns is carried on with the same accuracy and precision.

In the month of September, 1840, a fire broke out at Plymouth, which completely destroyed the *Taivra*, 74 guns, and the *Imogene* frigate; and the *Minden*, 74 guns, which was built at Bombay by our grandfather, was in the Dock, her head caught fire, which injured her bow very much; but by dint of great exertion, the progress of the flames was checked, and the ship saved from destruction. We walked on board the vessel with much pleasure and pride, as she was the first ship that was built out of England for the Royal Navy: and our grandfather had received the approbation of the Board of Admiralty for building this ship, and for which they made him a present of a handsome silver cup, made by Rundell and Bridge, the celebrated jewellers and goldsmiths of London.

There is also in and near Devonport, a gun wharf, which was built nearly a century ago; it

lies north of the back yard, and covers five acres of ground.

There are two storehouses in it, which contain a vast quantity of muskets, pistols, cutlasses, and other weapons ranged along the walls, and the ground is occupied by a great number of guns and pyramids of shots.

The Admiral was kind enough to give us his own gig, in which we went to see the breakwater. It is the most gigantic work that was ever undertaken and accomplished. During the late war with France there was a great difficulty experienced by the English vessels which were to be fitted out at this grand naval arsenal, in consequence of the harbour being open and exposed to the ocean and the southwest wind which is very prevalent in winter. A safe place of anchorage was therefore greatly required ; and by the means of this breakwater the natural defect of Plymouth harbour has been completely remedied ; and it is now considered one of the best in England. This work is another great instance of English perseverance, it so completely shelters the harbour. We noticed the water within the mound was smooth when the sea without it was in considerable agitation ; and we were informed that in 1817, two small vessels of war, that were anchored without the breakwater, were lost during a hurricane, while a small collier, that was under its cover, rode out the gale in safety. A writer, in

speaking of this extraordinary and stupendous work, in the Penny Magazine for the year 1836, says,

“ It was not until 1806, when Lord Howick (the present Earl Grey) being placed at the head of the Admiralty, the attention of the Government was turned to this important object, it is believed, at the suggestion of the Earl St. Vincent. A careful survey of Plymouth Sound was made by Mr. Whidbey, in conjunction with Mr. Rennie. These gentlemen reported on the practicability of rendering the anchorage secure by means of a breakwater. The commencement of the undertaking was delayed ; but on the Right Hon. Charles Yorke succeeding to the Admiralty, the engineers took measures for carrying the project into execution.

“ The plan adopted was to form an impenetrable barrier of large stones across the middle of Plymouth Sound, extending from east to west 1700 yards, and leaving an entrance on each side sufficiently capacious to allow the largest men of war an easy passage in and out of the harbour. The centre of the breakwater was to be 1000 yards in a straight line, continued 350 yards more at either end, at an angle of 120 degrees, by which form it was expected the force of the waves would be more effectually resisted. The breadth of the base was fixed at 120 feet ; at the top 30 feet, and the depth from

“ the upper surface to the bed of the sea 40 feet.
 “ It was computed that 2,500,000 tons of stone
 “ would be required to construct the whole work ;
 “ and the entire cost was calculated at £1,171,000
 “ sterling.

“ Every thing being determined on, a quarry of
 “ limestone, or rather grey marble, containing
 “ about twenty-five acres, was purchased of the
 “ Duke of Bedford, for the sum of £10,000. This
 “ lying contiguous to Catwater, at the head of the
 “ harbour, presented a secure spot to embark the
 “ stones. Twelve vessels of a suitable construc-
 “ tion were built in the Dockyard, and forty others
 “ hired, to convey the stones to their appointed
 “ station. Seven hundred artificers and labourers
 “ of all descriptions were engaged for the whole
 “ service. The first stone was deposited on the
 “ 12th of August, 1832.

“ The vessels were laden and discharged by
 “ means of the following contrivance :—Small
 “ iron trucks, each capable of carrying a stone of
 “ from two to six tons weight, were conducted
 “ along an iron railway, leading from the quarry,
 “ through the stern post, into the vessel’s hold.
 “ Each vessel carried sixteen of these trucks.
 “ The place where they were to discharge their
 “ cargo was marked by buoys, and by sights
 “ erected on the shore. On arriving at the spot.
 “ the trucks, with their burdens, were drawn out
 “ successively to the entrance port, the fall of

“ which dropped the stone into its place, while
 “ the carriage remained suspended by its tackle.
 “ In this manner, a cargo of eighty tons was dis-
 “ charged in forty or fifty minutes.”

The breakwater is now completed within about 30 yards at one extremity, which is gradually progressing, and will be two or three years before it is ready, because very few people are working at it.

We were very much pleased with our visit to this place, and left it, on the 5th of November, for Bristol, by a stage coach. We started at seven in the morning from Devonport, and came to Exeter where the coach stopped about half an hour, to allow the passengers to take some refreshment. It is invariably a custom for stage coaches to start from an inn, and to end their journey at an inn also; this is done especially for the comfort and convenience of travellers, who, by this arrangement, have no trouble in finding accommodations, at any hour of the day or night, in a perfectly strange town or place. These inns are very commodious, conducted by respectable people, and where every variety of food and drink, as well as beds, and private sitting rooms are to be had at reasonable charges. Exeter is the capital or the principal city of Devonshire; it is 172 miles from London, and is famous for the manufacture of woollen goods. At five in the afternoon we reached Taunton, a town in the county of Somersetshire; we here wasted only a

few minutes to change horses, and after a tiresome and fatiguing journey, arrived at Bristol, and put up at the "Lion Inn," where the coach stopped.

The distance between Devonport and Bristol is about one hundred and twenty-five miles, and in accomplishing this distance, we changed twenty-six pairs of horses, at about every eight or nine miles, and so expeditious they are in effecting this, that there is not a moment of time unnecessarily wasted. There is a man to every stage-coach, besides the coachman, who is called the "guard," to take care of the passengers' luggage; he blows a horn, or a bugle, when at a short distance from the station where the horses are to be changed; this is a warning to the people there, who, on hearing the sound of the horn, bring out the animals harnessed and ready to go into the carriage. Immediately on the arrival of the vehicle, the tired horses are relieved, and the four fresh horses put in, within five minutes.

Bristol is situated on the western coast of England, about eight miles from the mouth of the river Avon, which empties itself into the river Severn. It is said to be a very ancient town, and is the nearest port of England for carrying on trade with America.

The city has an ancient appearance, is not very regular, yet considerable in extent, paved, and lighted with gas, and some of the houses are very large, and of much external beauty.

We could speak but very little of this city, because the weather, during our stay of two days at this place, was very wet and disagreeable, and another misfortune was, we had no friend here. We were favoured with two letters of introduction from our kind friend, John Seppings, Esq., to Mr. Patteson, the builder to the Great Western Steam Ship Company, and to another gentleman belonging to the said company, the former gentleman whom we were most anxious to see, with the hope of deriving professional information, and especially regarding the largest iron steam vessel, that was there building for the Atlantic navigation by the company, but to our great disappointment, he was absent for a few days from Bristol. The other letter, however, was useful, as we obtained permission from the gentleman to whom it was addressed to view the company's dock yard and the vessel in question.

The successful voyages the Great Western steam ship made from Bristol to America, roused the attention of enterprising men in London to construct the large steam vessels, the British Queen, and the President, for the same purpose.

The Great Western Steam Ship Company also having seen the success of their first vessel, are now building an iron vessel, which will be the largest in the world. We went to see the dock yard, and we were very much struck at the large dimensions of this vessel; we very much regretted the

absence of the builder, and as his assistant was also not there, we gathered but a very imperfect account of this gigantic work; her extreme length is 343 feet, and is meant to be propelled by the Archimedes screw, instead of paddle wheels at the sides; her engines will be of 500 horse power each, and she will, when completed, cost about £100,000. sterling. Her frames were all up, and the bottom, which is composed of iron plates, was completed as far as the wales, except the part near the stern, and we were told that she would take a twelvemonth more to be ready for sea. Her engines were also to be made on the premises, for which purpose a foundry has been erected by the company, and a steam engine, lathes, planing machines, cutting and boring machines, and other necessary apparatus are fitted, and a part of the engine was already made.

We consider this as a very hazardous undertaking, because we have had but very little experience in sea-going iron steamers, as none of them have been running a sufficient length of time to prove the superiority of iron over wood, in salt water. For river navigation iron-built boats are very convenient, for they are lighter than wooden vessels of the same size, consequently they require a proportionate less draught of water; but where that is immaterial, which is the case at sea, we think wooden vessels are much superior; they will last longer than iron ones, and can be constructed to

sail quite as fast as iron vessels. The Halifax line of packets, now running between England and America, have shewn what steamers built of wood can achieve. We have conversed with many of our professional friends on the subject, and they agree with us in opinion that iron vessels, in consequence of the action of salt water on iron, by which it is soon destroyed, will not answer for sea.

An eminent engineer told us that he was informed by a ship builder of an improvement that he had made in building iron vessels, which was, that he used iron timbers, and made the bottom of wood, our friend justly remarked, that that was no improvement at all, it was only coming round from iron to wood again; this proves that iron boats are only fit for fresh water.

Bristol contains several sugar refineries, and the principal manufactures are, glass, tin work, braziers, snuff, leather, gunpowder, earthenware, and white lead. It also carries on a very considerable trade with West India and North America, and is said to be the second commercial city in England; it is, however, of late years, exceeded by Liverpool. We have read, that very few towns in England (the metropolis excepted) can boast of so many useful and charitable institutions; there are infirmaries, hospitals, a literary and philosophical institution, a public library, and many others.

The quay at Bristol is a wharf of upwards of a mile in length, which affords a great facility to the ships in loading and unloading their cargo, yet much damage was formerly sustained in consequence of vessels lying aground at low water. A floating harbour was therefore constructed in 1809, by damming up the river across, and opening a new channel, over which two fine cast iron bridges are erected. The harbour is entered by locks, and is capable of containing one thousand ships, which come in or go out at neap tide.

This undertaking is said to have cost about a million pounds sterling, which sum was raised in shares of £135. each; there are also several mercantile dock yards here, and the place presents a scene of considerable activity and business.

On the 8th of November we left Bristol for Gloucester, in order to proceed from thence the next morning by the railway to Birmingham. We started at four o'clock by the mail coach, and in four hours arrived at the Bull Inn, Gloucester, where we remained for the night. We found this the largest hotel that we had ever seen in England; it had beds and accommodations for more than one hundred and fifty persons, great attention is paid to persons that take up their quarters here, and it is particularly noted for its respectability.

Gloucester is an inland port, situated about 35 miles north east of Bristol, and we heard that

ships are conveyed here by means of a circuitous canal opened from the river Severn.

At seven next morning we left the hotel and joined the train, which started at half past seven, and as this line was not then completed as far as Birmingham, the passengers were conveyed the last seven miles by coaches belonging to the Railway Company. The distance between Gloucester and Birmingham is about fifty-four miles, and we reached the latter place at half past eleven.

The Birmingham station is a very large building, and there is a large refreshment room fitted up for passengers, and half an hour is allowed to those proceeding from London to Liverpool at this station for their meals. The train from London arrived the moment we reached the station, and we joined the Liverpool train which started at twelve o'clock. This line meets the Liverpool and Manchester at Newton, which is half way between the two places, and is called the Grand Junction Railway, and was completed in 1837. The whole distance from Birmingham to Liverpool is 97 miles, which the train performed in four hours and a half. At a quarter past five we arrived at a place called the Edgehill station, about a mile and a half from the Liverpool terminus, and we were very much surprised at the tunnel which leads from here to that place. After we entered the tunnel there was complete darkness, and in a few minutes we suddenly emerged into

day light. The effect was rather singular, and we were very much struck with the grandeur and boldness of the roof, and the surrounding buildings belonging to the company.

Our countrymen will be astonished when we tell them, that over the tunnel stands a portion of the town of Liverpool, and it seems very extraordinary and curious to imagine our travelling under-ground, while over our heads are moving about horses and men, and in fact every transaction carried on. Here then, again, is a remarkable proof of our frequent assertion, that the English are a most wonderful people.

We took up our abode at the Phoenix Hotel, Lime-street, which is situated only a few yards from the railway station:

We next morning went to the office of Messrs. Hollinshead, Tetley, and Co. to whom we had letters of introduction from our friends Messrs. Forbes, Forbes, and Co., of London, and it was owing to the kindness of the gentlemen of this firm that we were able to see all that we wished. They very politely directed a confidential person in their office, in fact their own cash-keeper, to devote his time in showing us about while we were at this place.

Liverpool is at present the great rival port of London, and 205 miles north-west of that great metropolis. It is seated on the right bank of

the Mersey, and has an excellent harbour, formed with much labour and expense.

We were told that about a hundred years ago Liverpool was an insignificant place, and contained a few thousands of inhabitants, but so rapidly did it increase in size, commercial importance, and population, that at present the inhabitants are said to be 200,000 in number, and the large docks with ships from all parts of the world, at once indicate the extensive trade of the port, and it is at present said to be the second port to that of London, and from the daily increasing traffic, and the enterprize of the merchants, it is impossible to say to what greatness this place may arrive in half a century more.

Liverpool is not a manufacturing town, but it is a great commercial mart, and from its proximity to Birmingham, Preston, Manchester, and Glasgow, large manufacturing towns, as well as the city of Dublin, the capital of Ireland, it attracts innumerable ships from all America, West and East India, and other parts of the world, for the accommodation of which large docks are constructed at a great expense, and the number of ships that are to be seen here is truly astonishing, they appear almost as a forest of masts, yards, and rigging, and the town, as well as the river Mersey presents a scene of considerable degree of activity, bustle, and real business.

The largest of all the docks is the Prince's dock, which was opened in 1821. It is 500 yards in length, and 106 yards in breadth, and covers an area of 57,000 square yards. On one end of it are vessels discharging their cargoes, while the other end is devoted to the foreign ships taking in their freights principally of the American flag. Large sheds are also erected all round to protect the valuable goods from the ever-changing and inclement English weather, the entrance to this magnificent dock is by gates 45 feet wide and 34 deep, and vessels can be admitted at half tide.

The Trafalgar, Adelaide and Waterloo docks, are also very fine, the latter was opened in the year 1834, and contains an area of 30,764 yards. These three are named, one from Lord Nelson's victory, one in honour of the Queen Dowager, and the other from the victory of the Duke of Wellington.

Besides these, there are the King's, the Queen's, the Brunswick dock, which communicate with each other, and near them are several merchant building yards. The Clarence dock is entirely appropriated to the use of the steam packets, that leave daily from Liverpool to Glasgow and Dublin; it has an area of more than 29,300 square yards, and 900 yards of quay room. There is also a basin of considerable size attached to this dock, and the steamers which lay here are all open for inspection to strangers.

The facility and the convenience these docks afford in loading and unloading the ships is extremely beneficial to the commerce and to this may be attributed the rapid advancement of the trade of Liverpool.

We were very much amused, and quite astonished at the enormous quantity of the valuable property that was deposited under the sheds near the docks, and the bustle that we witnessed here, hundreds of waggons were hurrying along loaded with cotton bales, piece goods, tobacco, hemp, rum, wine, spirits, sugar, and a great many other articles. Ships from every part of the world were taking in and emptying out their cargoes, and thousands of men, all full of business and activity were moving about in every possible direction, and we could not but help thinking what an advantage it would be to our own country where docks such as in England constructed there, and we hope that sooner or later our countrymen in India will in conjunction with their European brethren take this into their consideration, and make a beginning. The advantages of these docks manifest themselves in what we have spoken about this flourishing port.

The town of Liverpool is any thing but regular, and the streets most of them are confined, narrow and dirty. There are some however wide and straight, with fine shops and well lighted with gas. Some of the private buildings

buildings are good, and the part nearest the docks is like the "city of London," entirely open, devoted to the mercantile offices, shops, and immense warehouses for cotton, coffee, and other staple articles of trade. The Town Hall is a noble building, where the town council meet and public dinners take place; it is inspected by applying at the treasurer's office for a ticket. Our guide Mr. Littlejohn kindly procured admission for us, and we were conducted through a suite of rooms by a person paid for the purpose by the council, and who does not expect (as is the case in a great many public establishments in England) any gratuity. The saloon contains some very good paintings, and we were much pleased with the large dimensions of the ball room; it is 81 feet long, 41 feet 6 inches wide, and nearly as high. All the rooms are very well furnished and kept in excellent order.

After viewing the interior we went up to the gallery which surrounds the outside of the cupola, by ascending a flight of winding stairs. The prospect from this height is very good; the river, docks and shipping, together with the town and the country round can be seen from here, but it being a foggy day we could not see anything to perfection.

At a short distance from the Town Hall is the Exchange, where all the merchants congregate, and where mercantile transactions are carried on; it is a fine regular building, and the exterior is very neat and elegant. It embraces three sides of a quadrangle, in the centre of which stands a well-

executed monument of that great and immortal man, Nelson. It was erected in 1813 by private subscription, and is said to have cost £90,000. There is a news-room in this building which astonished us very much, it is 92 feet by 54, and we saw upwards of three or four hundred people, some talking, some walking about, while a great number were busy in reading papers, principally foreign. This is a very excellent plan, because a merchant can here learn all foreign news of trade, and know every thing that is going on at home ; he can also gain much information, and cultivate acquaintances, and all these advantages can be secured by the annual payment of a small sum. On a slate in this room we saw arrivals and departures of shipping, and intelligence of vessels either at sea or in other ports.

The people of Liverpool are, strictly speaking, a money making set, yet they have not neglected literature, the fine arts, and patronizing places of amusement ; for there is a fine exhibition of paintings, a mechanics institution, a public library, a zoological garden, three theatres, and several charitable institutions and places for recreation. The Theatre Royal is the principal one, and the other two are called the Liver Theatre, and the Amphitheatre, but we do not think it necessary to notice them after having described the theatres of London. They are not very large, and the admission to the boxes is only 3s. In the principal one, Mr. Carter, of whom we have spoken in

Astley's Amphitheatre, was showing his collection of wild beasts on the stage at Liverpool at the time.

We went to see Mr. Laird's Dock-yard at Birkenhead, which is on the opposite bank of the river, and small steamers convey people across. We received much attention from him, and we had the opportunity of satisfying our curiosity about iron vessels. The process of building vessels with iron is more simple and expeditious than with wood; there was one vessel nearly in frame, and another was approaching towards completion. There were smiths' shops, and a mould loft on the premises. Mr. Laird had lately built three iron steam vessels for the Niger Expedition.

We were anxious to see the three iron steam boats which Mr. Laird had lately built, they were in one of the docks at Liverpool; he therefore kindly promised to take us there the day following the next; and accordingly we accompanied him on that day to the dock where the vessels were fitting out. These three steamers are built by the British Government for the purpose of sending them to the river Niger, in Africa, in order to explore the country, to establish trade with the natives, to show them the advantage of commerce, and to endeavour to put down the demoralizing influence of the slave trade which now prevails among the Africans.

These vessels are built purposely for this laud-

able object, and the undertaking is called the "Niger Expedition," and a vast body of influential and humane individuals have formed a society collectively to co-operate with the Government in this enterprize, and we hope they may be successful in their praiseworthy object. The vessels are all very good models, and particularly adapted for navigating shallow rivers. They were equipped under the superintendence of Mr. A. B. Cruize, Foreman of Portsmouth Dock-yard, and who was kind enough to furnish us with the particulars that we required of these vessels. The two which are larger than the third are about 450 tons, have two engines of thirty-five horse-power each, and can carry coals for one hundred and eighty hours, or seven days and a half. The third called the Soudan, has only one engine of thirty-five horse-power, and can carry coals for five days (of twenty-four hours.) The interior of these vessels are very conveniently fitted up, so as to contribute as much as possible to the comforts of the officers and the ship's company.

In consequence of the warm and unhealthy climate of Africa, which is very uncongenial to European constitutions, great attention is paid to proper ventilation. The plan adopted for this purpose is very ingenious : Two fanners similar to those used for blasting the smiths' fires at Chatham yard, are fixed in the engine-room, they are put in motion by the engine, and when the engine

is at rest they can be moved by a crank handle. The fanned wheel when revolving with great velocity, forces a quantity of air which is conveyed to every part and every cabin in the ship by means of flat square pipes under the beams, and valves of thin plates fitted in every cabin to regulate the draught. In addition to which, similar pipes, two in number, are fitted in every cabin from the deck, having perforated tops or lids, the one reaching a little above the lower deck, and the other only a foot or two below the beams; and by this simple but scientific contrivance, a free ventilation is secured, because the rarified atmosphere which always floats at the top, or in other words, near the ceiling of a room, will escape through the short pipe, and fresh air will supply its place through the long one; thus there would be a constant circulation of air, which would render the apartment delightfully cool and pleasant.

We were extremely gratified in inspecting these vessels, they are very substantially built, and look very handsome and lively above water; the engines were made by Messrs. Forrester and Co. of Liverpool, at their manufactory called the Vauxhall Foundry, which we visited. On delivering the letter we had from the East India House, much politeness was shewn to us; and we were conducted round their establishment. There were no large works manufacturing. The foundry was large and there was every thing that is required for a

foundry, and several small steam engines were in progress.

On the 14th of November we left Liverpool by a magnificent steam vessel called the "Achilles" for Glasgow. She was nearly 1000 ton in burthen and four hundred and fifty horse power and her accommodations were the best that we ever saw, the saloon was very large, and well furnished, there were two fire places, and mirrors fitted into frames between the ports. The skylights were circular and very handsome, and sofas covered with silk were ranged at the upper end of the saloon, or the part nearest the stern, and the bed places were also very conveniently fitted up, and kept remarkably clean.

We entered the Frith of Clyde in the morning and the scenery on both sides of it was very bold and romantic. The mountains were very lofty and the summit of the highest was already covered with snow, which we were informed would not melt before the month of March or April: at half past ten we reached Greenock, and as our steamer could not go to Glasgow, on account of its being ebb tide, we were put on board a small iron steamer which conveyed us in two hours to that place. We were on deck, and as we approached within half a mile of the landing place, we attracted a great many people on shore, and many of them actually took the trouble of running along the beach, keeping pace with the steamer,

(which was going at a slow rate in consequence of the crowded state of the river) to the landing place in order to peep at us; and when we left the vessel, we were surrounded by at least a thousand persons, all noticing the peculiarity of our costume, which they very seldom see at that place, as we believe that no Parsee save ourselves and our cousin Ardaseer Cursetjee, had ever before been to Glasgow; we were not at all concerned or annoyed at it, because we saw the Scotch people were very much pleased at our appearance. We however had a gentleman waiting our arrival who immediately called a carriage for us, and we all were driven to Carrick's Royal Hotel in George's Square, where we remained the whole time we were at Glasgow, it is a fine place, and much attention was paid by the proprietor to us. It being Sunday we found every shop closed, and it appears to us that the Scotch were very particular in keeping the Sabbath. The next morning we were favoured with a call from Mr. Wright, who was requested by our friends at Liverpool, to pay us attention, he was accompanied by his son Mr. John Wright who had been to Bombay and knew our friends very well there, his brother is now a partner in the firm of Messrs. Nicol and Co. of Bombay and he himself is interested in the well known firm of John Fleming and Co. of Glasgow. And we must confess that we never dreamt of receiving so much attention from these gentlemen,

the latter was so very kind as to leave his business and kindly showed us round in showing us the workings of the mill.

We saw that the pleasure of being introduced to our friends, Mr. and his partner, James Watson, Esq. and we shall never forget the kind and cordiality we received from them and their families during our stay in Glasgow.

At Glasgow first took us to the Exchange, which is a building consisting of modern erection, and has a handsome portico in the front. The building is 100 ft. high and the principal room is always crowded with merchants and others who come to take newspapers, of which great numbers are printed daily in the town. There are about five hundred subscribers, and a stranger may be introduced by a subscriber and his name is entered in a book, by which he may have the privilege of going there for a fortnight free of any payment. The Exchange stands at the head of Queen Street, and at a small distance from it, is now building a handsome edifice, which is to be incorporated in the Royal Bank.

Glasgow is the principal commercial city of Scotland, and is surrounded with all sorts of manufactures, cotton mills especially, and there are large establishments here which employ thousands of people. It is situated on the north bank of the river Clyde, on which glided the first

steamer that ever was constructed ; and the people of Glasgow boasted of having several of them on the Clyde before there was one on the Thames, so that great credit is due to the Scotch people in paving the way for this most useful improvement, the adoption of which has been one of the greatest use to mankind.

The harbour is called the Bromielaw, and is always crowded with steam-boats and small sailing craft. There are no docks at Glasgow, in consequence of the river being shallow ; it has however been considerably deepened, and vessels of 600 tons can now come up to the harbour, where formerly there was not water enough for a vessel of 300 tons ; this shews the industry of the Scotch people, who, though not quite so active in their movements as the English, yet are well known for their indefatigable zeal and industrious habits. By taking things coolly and calmly, and making a steady progress, they have, within an incredible short period, raised Glasgow to that magnificence and importance as to be fit for the metropolis of the proudest kingdom on earth. The buildings, private and public, are quite as good as in London ; they are all built of stone, and the shops are very magnificent, and the streets are very well paved, but not quite so well lighted as London or Liverpool. The street called Troin-gate, intersects the whole city from east to west, is of considerable length, and it affords a very

interesting piece of street scenery, and is the noblest thing of the kind.

We went the same day (Monday) with Mr. Wright to see a pottery belonging to Messrs. ———; it is a large establishment, and the various processes in making this necessary article of domestic use are very pretty and simple.

It took us nearly two hours to go over the whole establishment, and we were so much pleased with it, that we think our countrymen would like to know how the articles, which they daily make use of, are made, we therefore copy a description of it from the Saturday Magazine for the year 1836, which we think is much better than any we could give. Before which, however, we have to observe, that the material of which pottery or porcelain is made, is composed of two things, clay and flint; a proper quantity of these are well mixed together, and prepared in a pit properly built. Great care is taken in removing impurities — even a grain of sand is carefully guarded against—and it has to go through two or three processes before it is fit for use.

In the quotation we have omitted a sentence, in which reference is made to the wood-cut in the work.

“ The clay being prepared, the potter forms it
 “ into various articles by throwing, pressing, or
 “ casting. Throwing is only employed in the case of
 “ circular vessels, and the operation is performed

“ by means of a potter’s lathe. The operator,
 “ placing a lump of clay on the revolving wheel
 “ before him, moulds it into the required form
 “ with his hands; and in order to ensure an
 “ uniformity in the size and curves of a series
 “ of vessels, he employs hollow moulds and thin
 “ pieces of wood, whose edges are cut in different
 “ curves, as modelling tools.

“ The vessel being now rudely formed into
 “ something like the required shape, is removed
 “ from the lathe, and set aside to dry. As soon
 “ as it has become sufficiently dry for the pur-
 “ pose, when it is in what is called its green state,
 “ it is removed to the turning-lathe; here it is
 “ turned, by means of iron tools, into a more
 “ correct form, and its surface is burnished with
 “ a smooth steel instrument. In this part of the
 “ process the handles and ornaments are fixed on;
 “ the parts on which they are to be fixed are pre-
 “ viously wetted, and clay reduced to a thin con-
 “ sistence and called slip, is employed for the
 “ purpose of, as it were, glueing them on. They
 “ are now removed to a drying-stove, or oven,
 “ which is kept at a temperature varying from
 “ eighty to ninety degrees of Fahrenheit’s ther-
 “ mometer, and when removed from thence they
 “ are rubbed over with a whisp of tow to smooth
 “ any inequalities.

“ Another process is pressing, by which mode
 “ all oval vessels are formed. The mould into

“ which they are pressed is made of plaster of
 “ Paris, generally in several pieces, so that the
 “ different parts of the vessel, when removed from
 “ the mould, have to be united by means of pres-
 “ sure, the edges being first moistened with slip.

“ The third method of producing form is by
 “ casting; the clay, in this case, is made into the
 “ consistence of cream, and poured into a plaster
 “ mould, previously dried. After remaining in
 “ the mould a certain time, the liquid clay is
 “ poured off. That part, however, which is in
 “ contact with the dry mould, has had so much
 “ of its moisture absorbed by the plaster, that it
 “ is too thick to flow, and remains in the mould,
 “ forming a thin coating on the inside, in the
 “ form of the article required. The mould, and
 “ its contents, are removed to a stove at a gentle
 “ heat, and as the clay loses its moisture, it be-
 “ comes firmer, and shrinks a little, so as to be
 “ easily removable.

“ The ware, now dry and hard, is fit for the
 “ furnace, and is called, in this state, biscuit.

“ The kiln, or furnace, in which the biscuit has
 “ to be baked, is a building with a cylindrical
 “ cavity and a flattish dome; the vessels are
 “ placed in cases or saggars. These are formed
 “ of baked clay, and protect the ware from the
 “ direct action of the flames of the furnace; but
 “ they are not employed in baking large common
 “ red ware.

“ After passing through the furnace, the vessels
 “ are in a fit state to receive the printed designs
 “ with which most of our earthenware is orna-
 “ mented. The designs, which are engraved on
 “ copper-plates, are printed at a rolling-press in
 “ the usual manner ; but the paper on which they
 “ are printed is previously rubbed over with soft
 “ soap.

“ The colour employed is ground up with some
 “ colourless earthy matter, and with linseed oil.
 “ After the design is printed, the face of it is laid
 “ on the porous vessel, and pressed closely to it ;
 “ the consequence is, that the colouring matter is
 “ absorbed, and when the paper is removed and
 “ the surface wiped with a wet sponge, the design
 “ appears distinctly on the surface of the pottery.

“ Almost every description of pottery is glazed.
 “ The glaze consists of any substance which will
 “ melt at a lower degree of heat than the vessel
 “ itself, and forms a kind of enamel ; the use of
 “ the glaze is to remedy the inconvenience of the
 “ porous nature of the baked clay. The glaze,
 “ except when salt is used, is formed into a liquid
 “ of the consistence of cream ; into this the vessel
 “ is dipped, and again subjected to the heat of
 “ the furnace.

“ Many substances have been employed as
 “ glazes ; some very imperfectly answering the
 “ end proposed, and others extremely noxious in

- that was the last method of gassing common
- was the poisoning of soil, which, when thrown
- into the water, increased like it with a vapour;
- in the meantime, I sat in the vessel, and
- saw nothing. I had a very excellent, at least a
- very pleasant experience.

- Composition. The lime most usually em-
 - ployed for building work, is composed of li-
 - mstone, a combination of lime, which reacts into a
 - salt in lime at a certain heat. This is de-
 - scribed in two ways: first, as the workmen,
 - use the lime not immediately dehydrated: and se-
 - condly, in lime with the water in cooking,
 - as the lime is often dehydrated by acids, parti-
 - cularly hydrochloric, which converts a part of it into
 - lime in lime, a very virulent poison. The
 - reaction lime formed by lime, and the low
 - heat at which it reacts, are the chief causes of
 - its poisonous character.

The cause of the cracking of the glass is, that the glass itself and the clay of which it is formed, expand and contract in different degrees, by the alternations of heat and cold.

There is one description of common earthenware, called stoneware, which possesses many valuable properties: it is extremely hard and strong, and although not glazed, it is not porous, and has a tolerably well polished surface. In spite, however, of these excellent qualities, it is

“seldom employed in the manufacture of any other articles than pitchers, and blacking and soda-water bottles.”

In another establishment, at a short distance from the pottery, we saw calico printing, and we admired it very much. We first saw white pieces of muslin, passed under an engraven copper roller which printed the ground pattern. Oil colour is used for the roller, and for block printing; when the piece was finished here, it was removed to a table, and spread even on the surface, and was printed with wooden blocks, having different devices on one side, and filled with colour; this side of the block was placed upon the muslin, and a quick but gentle blow of a hammer was given to it, which transferred the colour from the block to the muslin; by this process the whole piece is first printed with one sort of colour, and, if there be a variety, it is done in the same way one after another. We then saw them making the printing blocks. The patterns are obtained by letting in thin strips of copper into the wood, the surface of which was smoothly planed.

There were in the room several of these pattern makers; they were all seated near tables, and were proceeding with their work with an astonishing rapidity. Their tools were very finely made; and much care is required in making the patterns, as the edges of the minute pieces

of copper, of which there may, perhaps, be upwards of a hundred in one block, ought to be all level and even; the least projection will obstruct a proper impression on the calico. The designs are first painted on paper for the guidance of the pattern maker; and this department of the manufacture is exceedingly pretty.

We were shown some of the old blocks, in which the designs were carved; it must have been a very tedious and expensive work, and the designs could not be obtained to such perfection as in the present way; so that it is a very great saving, and a decided improvement in the art.

On the 17th, we went to see Mr. Napier, the engineer, but he was not in the foundery; however his foreman showed us all round his manufactory, which is called the Vulcan Foundery. It is an extensive establishment. Mr. Napier makes, on an average, about 3000 horse power of engines annually. We saw a very large piece of casting; it was a foundation plate and condenser in one piece, and the whole weighed about 37 tons; and to show how difficult a task it is to cast such a piece, we were told that the entire cost of it was £700; and the whole would have been lost had there been a slight negligence.

In the several buildings there are all kinds of machines for turning, cutting, and planing the various parts of the engine. At a short distance from this is a smaller foundery also belonging to

Napier, and close to it a building yard, in which an iron steamer was building, for the Honourable East India Company, for the purpose of sending her to India. She was only temporarily put together, in order to be taken to pieces. Six captains of the Royal Navy were studying steam machinery under Mr. Napier at the time, and we think that their services will be of much value to the Government.

Our friend, Mr. Wright, took us to see a large manufactory of carpets in the afternoon; the establishment was very large, as 500 persons were here employed; and the works were carried on in an extensive building four stories high. We first entered the ground floor; and never were we more surprised than at this place. We found that there were various wheels, levers, and complicated machines moving at a rapid rate, large quantities of wool were strewed about, and a great many women and children running about from one place to another.

This was the room in which the wool was spun by machinery, which is so very complicated, and of such arrangement that it would require a thorough knowledge of engineering to give a description of it, and it would therefore be vain for us to attempt it. We can only say that we saw wool, in its coarsest state, put successively three times into the spinning-machines, which cleared it from dust and impurities; and

I was then conducted into yarn for weaving the fabric. The yarn is made by stretching and twisting the wool in a number of bobs, which are put into motion by the engine, and revolve at a great rapid rate. This process is repeated according to the degree of fineness to which the yarn is to be made.

The yarn is then dipped into coloured liquid prepared for the purpose: this is called dying, and then it is put into the loom.

There were in the upper rooms about 150 looms, which are all worked with manual labour, and not with engine. And we saw them making a great many sorts of beautiful carpets, varying in price from 1s. 6d. to 11s. a yard. We also saw here some very fine specimens of Edinburgh carpet, which is a patented article. The chief beauty of it was the effect of light and shade that is worked in flowers which appeared very elegant.

We would here wish to state that we saw a silk spinning mill, and two or three cotton manufactories, all of which were very large, and the process of spinning was nearly the same as in the Carpet weaving establishment; but the looms were worked with steam; and piece goods of every sort, silk as well as cotton, are made at Glasgow. In one of the manufactories the owner has invented a loom which weaves four pieces at once, instead of only one, as is the case at present, so that a great quantity of labour is saved; and

he told us that he will be able, when this loom will be extensively employed, to sell piece goods manufactured by it much cheaper than any hitherto offered to the public. We were quite convinced of it, as we saw that one person attended two looms, and which wove only two pieces, and this loom, which does four times as much work, requires only one person to manage it; half the labour is therefore saved.

In all the mills, women and children are principally employed; but their appearance excited our compassion, as we noticed almost all that were thus employed, were meagre and pale looking creatures, and their health is very soon injured from the heat and impure atmosphere of the rooms in which they work; however, on the other hand, we wondered how occupations could be found for the thousands of beings, and how could they support themselves had it not been for these establishments.

Our friend, Mr. Wright, took us to see the chemical establishment of Charles Tennant and Co., it covers an area of about 11 acres within its walls, and the buildings, in which the works are carried on are very numerous and of considerable dimensions. They manufacture here sulphuric acid, bleaching powder, soda, and soap; we were told that 600 tons of coals were weekly consumed here. It was established in the year 1803, and is said to be the largest and most extensive chemical

works in Europe. In one room we saw enormous quantities of soap, and in others soda and the bleaching powder.

A very large circular chimney was to be erected, which we were told would be upwards of 400 feet high: the fire-places, furnaces, and retorts were upwards of one hundred in number, and the works are very well conducted. On the 19th we had the pleasure of seeing Mr. Napier, who showed us very great kindness, and nearly devoted the whole of that day to us. We saw the improved cotton mill we have spoken of through his kindness, and he took us to the Bridewell, the prison for criminal convicts, and we saw here a great number of male and female prisoners; many of them were employed on hard work, the females were working with a large wheel used for spinning cotton and wool: it appeared to us to be very hard work; the men were compelled to work at that which they could best perform, or, in other words, to manufacture articles of their trade, there were tailors, shoe makers, carpenters, weavers, and a great many others busily employed, among them we saw one who was making beautiful wheels and other things for clock work, and we much regretted to see a man there, who could by industry gain a decent livelihood thus disgrace himself by committing crimes and plunge himself into misfortune and misery.

We afterwards saw the Andersonian Museum,

where a great many curious things are very well arranged in two rooms. Before we left Glasgow, we spent a very pleasant evening with Mr. Napier, who greatly obliged us with politeness and attention.

England and Scotland abounds with institutions charitable and educational, and we have noticed some of them in the preceding pages, but we were most delighted with the Asylum for the Blind, which we inspected in company with our friend, Mr. Wright; we were first shown into a room where poor blind females of different ages were seated on benches, which were placed against the wall, and all of them busily employed in knitting stockings, doing needle-work, and preparing household linen. A lady who was our guide then called one of them, and bade her read a Bible which lay on a table in the midst of the room; when it was open we saw that it was different from common printing; the leaves were printed not with ink and common type, but with Roman capitals in relief, that is, the letters were raised from the surface of the paper so as to make them readable by the touch, and we were quite astonished to see the girl placing her finger upon the letter, and by feeling read a few lines with great ease, but what surprised us the most was the dexterity with which she pointed out places and towns on a map, which is constructed on the same principle; it was a board on which the boundary

of different years and the courses of rivers were marked in their walls, and pin-heads were placed at their new towns. We confess that we could not hear the voices there so readily, and we could not see them thinking what a misery it must be to live in these unfortunate things, suffering under severe misfortune. There is no kind of food and beguile their mouths of pain and affliction. They are also taught music, which is also printed in embossed words, and we were told that they learn very quickly, and their industry generally speaking is very great.

The work was invented by Mr. John Alston, the inventor of this system, for the instruction of the blind, and we think that he has immortalised himself by doing this act, calculated to alleviate the sufferings of thousands of human beings, by giving them intellectual occupation, who otherwise might feel their lives in misery and ignorance. In another part of the building we saw a great many blind young men who were making baskets, ham-pers, shoes, &c., with such business-like style, that they seemed to be for the moment insensible of their privation, and seemed to be very cheerful and perfectly reconciled to their lot: we saw some manufacturing tape, door-mats, and weaving a sort of coarse cloth with looms. They are fed, clothed, and taught all this, in the establishment, so that when perfect in their craft, they are enabled to obtain a livelihood.

Among all the inmates, we noticed a person who was deaf, dumb, and blind ; she is an object of great sympathy, yet she seemed to be happy in the situation that she was placed in ; she was cheerfully working away with a small spinning-wheel. She was also taught to read and write and communicate her wishes by certain signs. Our guide pressed her fingers, shoulders, and the palm of her hand, which she informed us was asking how she was, and the poor creature by similar means said she was "very well." There are schools for the blind in all principal towns of England and Scotland, and these benevolent institutions do the people of Great Britain a great credit. We also heard them play a tune on an organ in a room which was appropriated to divine service. Voluntary contributions are received on the premises, for which purpose boxes are placed in two or three places, and we think every person who can spare even a small sum ought to contribute towards the maintenance of this humane and charitable purpose. We also saw extensive chrystal works belonging to Mr. Watson, of Glasgow, and we here witnessed the method of making wine-glasses, tumblers, and goblets. In the midst of a large building was a circular furnace, having about five or six fire places, and a great many people were working here the various processes ; the processes a glass undergoes before it is fit for sale are

very pleasing, and well worth seeing. We cannot give a proper account of a thing quite new to us, and which we never saw again. We were told that the materials of which glass is formed are sand, saltpetre, red lead, and manganese. In another room we saw them cutting and polishing various domestic articles, such as tumblers, glasses, &c.

We also paid a visit to the warehouse of Wingate and Sons, where we saw some very fine specimens of needle-work, both English and French, and an enormous quantity of shawls, silk handkerchiefs, and Scottish plaids. The warehouse of Campbell and Co. is very large, and contains an incredible quantity of cotton piece goods of every description, and hosiery, but we were surprised to find that the prices of the piece goods which we expected must be cheaper than at Bombay, was, on the contrary dearer than at that place. This inconsistency can be only accounted for by supposing the market at that place to be always overloaded with stock.

On the 21st of November we went to Greenock in a fine steamer called the Admiral, for the purpose of seeing the vessel that was building by Messrs. Scott, Sinclair & Co., for the Royal West Indian Mail Company. Greenock is situated at the mouth of the Clyde, about twenty-four miles from Glasgow. Here are docks, building yards, and steam-engine manufactories. We saw our

friend Captain Kincaid, who built the ship John Fleming here; he was kind enough to take us over to the dock-yard, and we saw the steamer that we were anxious about, she was in frame, all her timbers were of good sound oak. This vessel was building for the West India Mails; we could not see her plan in consequence of the absence of Mr. Scott from the yard. We then accompanied our friend to his house, which was pleasantly situated a little way beyond Greenock. The town is very dirty and extremely irregular, and none but those immediately connected with the dock-yards, shipping, and the manufactories reside there. We returned to Glasgow the same evening.

There is indeed so much to be seen at Glasgow that one could very well spend five or six weeks there; but as we could not spare much time we took our departure on the morning of the 25th, highly delighted with all we saw, and equally grateful to all who showed us attention and hospitality; it is but justice to say that the gentlemen belonging to the various manufactories that we inspected showed us much politeness, and took a delight in giving us all the information we required of them without the least reserve. It is a noble feeling among the English and Scottish people, they are always kind, hospitable, free and full of politeness and affability, and ever ready to oblige those who come from a distant clime to

seek after knowledge in their truly fine and unequalled country.

We left Glasgow at twelve o'clock by the "Achilles," the same vessel that brought us from Liverpool, and after a detention of a quarter of an hour arrived at Liverpool at eleven o'clock next morning.

On the morning of the 1st of December we left Liverpool by the railway at eight in the morning, and after waiting half an hour at Birmingham, reached the station at Euston Square, London, at half-past six in the evening without feeling the slightest fatigue. Thus terminated our tour through the country, which we shall always recollect with much pleasure when in India.

We here annex a tabular form containing the distance that we travelled in the whole in different conveyances, together with the charges of passage-money, and the actual time that we took in moving from one place to another, in order to show our countrymen at one glance the facility of travelling which exists in England; we shall therefore arrange the table in the same order that we accomplished the tour: thus,

Names of Places.	Distance in Miles.	What Conveyance.	Time in hours.	Rate in shillings.
From London to Southampton	77	Railroad.	3	20
From Southampton to Portsmouth	16	Coach.	2	6
From Portsmouth to Plymouth	130	Steamer.	24	25
From Plymouth to Bristol . .	125	Coach.	15	50
From Bristol to Gloucester .	35	Coach.	3½	14
From Gloucester to Birmingham	54	Railroad and Coach.	4	15
From Birmingham to Liverpool	97	Railroad.	4½	23
From Liverpool to Glasgow .	250	Steamer.	21	15
From Glasgow to Liverpool .	250	Steamer.	22	15
From Liverpool to London .	206	Railroad.	10	53
Total	1240		109	336

By examining the total number of miles, shillings, and hours, it will be seen that in three days and eleven hours we travelled 1,240 miles by three different sorts of conveyances, on an average a little more than $2\frac{1}{2}d.$ per mile, and at the rate of about eleven miles and one-third per hour. This facility and cheapness no country can boast of except England, and no people could effect it except Englishmen.

What will our countrymen say, when we tell them that in England a person might leave London by the railway for Birmingham, a distance exceeding by twenty miles that between Bombay and Poona, and after taking his dinner, and seeing a friend or two at that place, comfortably

return home to enjoy his cup of tea in the bosom of his family the same evening. It would also seem extravagant to them when we say, that a resident of London can accept an invitation to take tea at a friend's at Liverpool on a Sunday evening, he may leave town for the latter place in the morning, enjoy the company of his friends there for four hours, and by seating himself in a railway carriage he would have his breakfast at home next morning and attend his duty. In that time he will have gone over four hundred and twelve miles of ground, one hundred miles more than *twice the distance between Bombay and Surat !!!*

No country, therefore, can be considered to possess so much talent, and means calculated to increase and extend commerce, and the physical comforts of its inhabitants, as Great Britain. Surely it is a great country; nay, the greatest on earth at the present period.

CHAPTER XXXII.

CUSTOMS, MANNERS, EDUCATION, &c.

We have during our visit to England had an opportunity of seeing a good deal of English society of several sorts, and if any of our observations upon manners and customs so dissimilar to our own should appear to be of a personal nature, we would here wish to say it is far from our intentions; as our only object is to convey to our countrymen such things as appeared singular to us, and we should consider ourselves very ungrateful and undeserving, received as we have been into families with perfect confidence, if we violated that confidence by making any remarks, disrespectful to our good and kind friends.

Our customs of having our food prepared by one of our own sect, prevented us from accepting very many kind invitations, it has only been at the houses of such of our friends who have allowed our servants to occupy their kitchens in preparing our meals for us, that we have been

able to spend the day with them; we have however had the honour to spend several evenings at the house of our kind and worthy patron Sir Charles Forbes in Fitzroy Square, and here we would beg to express how deeply we feel the numerous kind acts of friendship that we have received from him and all the members of the family. We were from youth told or rather taught to regard him as a most attached friend to the natives of Bombay, and more particularly so to our own family, and it has been our good fortune to know by our visit to England that his kindness and zeal for the natives of the east *was not fully communicated to us, as we found and saw him* much more devoted to their cause than the idea that was conveyed to us of him *by words*. For our own selves whenever we wanted advice he kindly gave it, whenever we asked for information it was immediately afforded us, and whilst life and reason continue with us, we shall recollect him and all his acts of patronage, friendship and kindness. At Sir Charles's we often met our good and warm friend Mr. John Forbes, and how shall we tell our grief, that during our stay in England, he was taken away from earth? Death laid his cold hand upon him and his heart ceased to beat, and oh! what a heart was that!!! yes, we felt that we had indeed lost a *friend*. We knew that our countrymen were by his death deprived of one of their warmest advocates, and England, of one of her noblest citizens. In

private life he was a moral, virtuous, polite and philanthropic man, indeed he must be considered as it were a citizen of the world for he loved every human being. We lament that a father should be deprived of a son who was a perfect model of filial duty. We feel sorrow that he should have been taken away from his wife and his dear young children. As private individuals, we deeply regret losing a kind personal friend. But as Parsees we grieved! we grieved!!! most deeply, that so honest, so warm-hearted, so talented, so distinguished a man should be taken away from a sphere where with his energies, and his abilities, he might have made known to the world the estimation in which he, from his knowledge, held many of the natives of Bombay *particularly*, and of India *generally*. God's will, however, we must not repine at, and we beg and pray of Him who made us to shower down blessings on the worthy father of our lamented friend and his family; may health and peace attend them. And that his children may tread in the steps of their father and grandfather is our fervent prayer.

We also met at Sir Charles Forbes's, Montgomery Martin Esq., a gentleman who has by his writings and by his exertions represented the people of India in a more favourable light than any previous writers, who from their limited knowledge of the customs and manners of the people of India, published statements completely

at variance with facts. They wrote no doubt what they were told, and what they believed to be true, like a modern writer upon Bombay, who, in describing the sect to which we belong, has in her volume totally misrepresented from want of knowing better the Parsees and Parsee customs. She seems to write from her own knowledge, and yet half what she says about Parsees is inaccurate; she is made to say,—that when houses are burning in Bombay the Parsees look quietly on, and do not make the slightest endeavour to check the progress of the flames in consequence of their religious scruples. Now this is notoriously at variance with the fact, as in many cases Parsees have been the most instrumental, and useful in putting out fires when they have occurred. We can assert this without the fear of contradiction for we have seen Parsees running to the scenes of destruction when they unfortunately happen. A fire took place a few years since at the residence of one of our family, and the inmates (*all Parsees*) were the very first who endeavoured to overpower the destructive element. It is true that we pay a certain religious reverence to fire, but not so much, as to suffer a house to be burnt to the ground rather than extinguish it.

It is not necessary to enumerate all the erroneous statements published by many writers, and our knowledge of the English character forbids our attributing wilful misrepresentation to any; yet

we cannot help regretting that imperfect and inaccurate accounts should have ever appeared before the British public, of the habits and customs of a class of people, who, it has been acknowledged, are the foremost in doing good, by supporting charitable institutions, &c. &c., and who, moreover, are the best and most loyally attached subjects of the British crown.

Mr. Martin has written much for India, and he has put the English people in possession of the *first* history of *all* the British colonies that was ever published; and all his observations in that work have been founded upon facts and official documents. We have felt proud in knowing a man who has written *so much* and *so well* upon our native country; and we think and believe him to be a true friend both to England and India, who inculcates the principles of love, affection, and friendship between the people of both countries, as he invariably does.

We will now tell how we have been received and treated at the house of an intimate acquaintance; upon entering the room, the master and mistress and all the family rise to receive you, and offer you the seats of honour, which at the season of the year when fires are required, are arm-chairs next the fire. And we would prepare such of our countrymen as may visit England, to expect a hearty welcome, and a friendly shaking of the hands, much courtesy, and great kindness from all

with whom they may become intimate. Males and females, old and young, all strive in their respective ways to do something to make you pleased and happy. or, to use their own strictly English word, *comfortable*. You have only to express that you like this thing or dislike that, and if it is in their power, your wishes and views will be met.

One example of domestic society into which we were most familiarly admitted, will convey some idea of how English families in the middle classes of society live. This gentleman is a widower, and has been so for nearly two years. He has seven daughters, the eldest sixteen, and the youngest two; so that there are about two years difference between each. Six out of the seven go as weekly boarders to a school in the neighbourhood, and come home on Saturday at 12 o'clock, returning to school on Monday, at nine in the morning. They are taught reading, spelling, grammar, geography, and history; and they have weekly to repeat answers to questions on miscellaneous subjects connected with useful knowledge. A French lady resides in the house, and they are all taught the French language. A master teaches them writing and arithmetic; and music is taught by a male and a female teacher. They rise at school at seven, breakfast at eight, dine at one, and have an evening meal at six. We visited their school with their father. It was their dancing day; all his six children, and about

twenty others were being taught to dance, to walk, and to make a curtsy; they were instructed, by their dancing master, how to enter a room, how to carry their heads erect, and how gracefully to rise up from, and to take their places in, their seats. It was to us very gratifying to see these little innocent happy beings, who were most of them to become mothers and heads of families, thus taught how to carry themselves so as to appear like genteel, well-bred young women. At Midsummer, in June, and July, and at Christmas, in December and January, they have holidays, and go home for six weeks each time; and it was then that, as a frequent visitor, we became acquainted with their every day habits and customs.

Taking the summer as the period we would describe: they rise at seven, and take a little walk in their flower-garden, and sit down to breakfast at eight. Their breakfast would consist of coffee, bread and butter, and toasted bread, some dried fish, cold meat, consisting of ham or tongue, and sometimes radishes or water cresses. Some of them would then practice music upon the piano, some would draw houses, trees, &c., some would mend their clothes, some would work raised figures, with wool, or silk, on canvas, or net silk purses, or make little fancy articles for presents to their friends, or perhaps some one would read aloud an amusing book, or perchance

one would sing a song. This would be done until twelve or one o'clock, when they would have a luncheon of biscuit or cake with a little fruit and water. And then they would take off their morning frocks, usually made of a neat printed cotton, and put on their out door walking dresses of a fine muslin made of wool, and covered with flowers or checks. Straw-plaited bonnets with pretty ribbon and a little cape to cover their shoulders, or a thin silk handkerchief round their throats and necks. They would then walk and make calls until four o'clock, when they dined. And as this family professed to live in a plain way, they would have either a joint of roast or boiled lamb or mutton or beef, or, perhaps, fowls and a ham, or ducks. Generally two or three sorts of boiled vegetables, potatoes, cabbage, cauliflower, peas, or asparagus; and then would have puddings or pies made from fruits, currants, gooseberries, cherries, or raspberries, and at other times from apples, with boiled or baked custard made from eggs, milk, and spice; and lastly, bread and cheese. Beer, water, or wine would be drank whilst at dinner; and after that fruits, the production of England, apples, pears, plums, peaches, apricots, nectarines, grapes, cherries, currants, strawberries, raspberries, gooseberries, such as happened to be in season, with wine, would be placed upon the table, which is called the dessert. They then either walk again, or resume their morning occupations, or

sometimes play at chess or draughts or cards, or, perhaps, write letters. At about eight, either tea or coffee, and cakes or toasted bread or bread and butter are partaken of, and sometimes they take a little light pastry and fruit, with a little wine and water before they go to bed. The younger ones go to bed about eight, and the three elder, sixteen, twelve, and ten years of age, sit up until after ten.

This is only a quiet picture of every day life in a family. The four eldest daughters write, and understand arithmetic. They play tunes upon the piano, and talk reasonably upon almost everything. One about four and a half years old, repeated perfectly a long piece of poetry, called Pope's Universal Prayer; and one, six years old, repeated a great many poems, and could spell every word we asked her, and knew the multiplication table.

We have thus given the particulars of the acquirements and education of young females in England, in order to induce mothers in India, the wives of natives, to establish some such system to educate their children. Why should they not have boarding-schools conducted as the English ones, always of course having female teachers therein instead of males. For oh! if they could but know the host of amusements and recreations that by education are afforded to females. They can read in two languages generally, and how

many hours does not this pass happily away. It teaches them to think rightly and well upon most subjects. And then, drawing; how delightful is it, if you see a place, that you are enabled to sketch it upon paper, and to copy flowers and trees, and even people. Music, too, how soothing! how cheering! how enlivening! how pleasant! for a wife to be enabled to play to her husband, to her children, and to sing to solace them. And then to write to those when circumstances call them far away; to express to them at a distance the feelings which those at home bear to them, and to be able, though thousands of miles distant, to write to tell of the manners and customs of those among whom you are journeying. Oh! our dear countrymen, let us urge you, let us implore you to add to the happiness of your daughters by giving all of them education. The education of boys in England, sons of the middle and upper classes, are at schools, where Latin, Greek, French and German is taught, in addition to English, and the mathematics are strongly enforced as a leading branch.

It is thought a public education is much the best for boys, as it gives them a spirit of competition, and a school is quite the world in miniature. Many noblemen and gentlemen have a private tutor in their houses for their sons; but it has been found that young men privately educated have not generally been so tolerated as those brought up at a school. Very many private families have a go-

verness in their houses to teach their daughters, and have masters to attend for writing, music, singing, French and Italian. But this of course costs much money, and can only be done by those who have first-rate incomes. The children of persons with small incomes attend as day scholars at schools where for about £4. a year they get a good plain education. For the children of the poor of both sexes, there is scarcely a parish in England, but what there are schools kept up by subscriptions among the middle and upper classes of society, and where poor children are taught reading, writing, and arithmetic, and the girls plain work; and in addition to this there are Sunday schools for those poor children who are obliged to work for their livings on the other days; and where charitable people give their money to build school-rooms and also attend themselves, both males and females, to instruct the children of the humbler classes.

Yet notwithstanding these facilities for obtaining education, a large number of poor people in England do not send their children to any school; these people will have much to answer for. The man and woman who can read and write, often have a chance to better their condition by obtaining an easier employment. And besides, how much happier must that poor working man and woman be, who, when their bodies are worn out with toil and fatigue, can take up some book and

amuse their minds by reading. We hope to see schools for the poor extend all over India, and we should be most happy if every native of India could read. We should state that to a great number of persons in the middle and higher classes of society, the style of living before alluded to, does not at all apply; they have soups, fish and game every day, and they almost always have six or eight dishes of different meats or poultry, and this would lead us to the remark of the great length of time that is every day occupied at meals by the English people; they usually spend half an hour at breakfast, nearly two hours at dinner, and half an hour to their afternoon meal, and frequently more than half an hour at supper. Now this consumes nearly a quarter of their time, and does appear to us to be a very great waste of that invaluable commodity.

We thus have described the manners of society and the education of children in England, as well as the advantages and pleasures that are to be derived from an acquaintance with learning, and we once more beg of our countrymen, we once more implore them, to reflect as they read this work, in which we have enumerated the advantages of the scientific and literary institutions in England, and they will at once see that they are the result of unremitting perseverance of those who have in former and present ages given themselves up in pursuit of knowledge, and have immortalized them-

selves by making known to the public, or we may say to the world, their discoveries and inventions, and the greatness which England has attained, and the wealth she possesses is all the fruit of knowledge, or in other words, science arranged in a system, so as to be easily acquired, remembered, and applied to useful purposes for the physical comforts of men, in addition to the gratification it affords to the mind. Thus, the English can manufacture articles to clothe men, make all sorts of instruments to perform anatomical operations, and medicines to alleviate the sufferings of human beings. They can supply water to houses with steam, and light the streets without oil, they can travel by land or sea with steam, and aye—they can even cook the food which they eat with steam, and this is all done by science. They can blow up sunken ships and clear out harbours, they can travel underneath a river, while over their heads ships are passing, and this all done with the aid of science and art; in fact, it would be impossible for us to show what mighty works are performed by the aid of science.

We will not conclude this subject without observing that it is the incumbent duty of those who have been liberally educated, to exert their utmost endeavours, to come forward and show to their fellow brethren the advantages of knowledge, and the pleasures they derive, and the fruit they reap from its blessed field.

We are firmly of opinion that if those who can afford to appropriate a portion of their income to luxuries would unite into several small bodies, and were subscriptions raised among them to hire rooms, and collect a library of easy reading and useful works, and take in daily newspapers, and were the subscribers to frequent these places, a taste for reading would thus be created, and it will be the first but surest step towards further and higher advancement to learning ; it may be as well for any subscriber who is well acquainted with any particular subject in art or science to lecture upon it : and they will soon become so interested as to extend the collection of books, and an increase of members will speedily follow ; at least, such has been the history of a great many of the useful institutions of London.

We also recommend those students of the Native Education Institution, who have brightly shone forth in their acquirements to lecture on the elementary principles of science, to translate such books as would excite people to higher and more intricate branches of learning.

Such indeed must be the plan to diffuse knowledge and information amongst our countrymen, and we hope we shall live to see the day, when it will be extensively and generally carried into effect.

CHAPTER XXXII.

ALBUMS. EPITAPHS.

WE forgot to mention, that upon visiting the houses of several of our friends in England, we found lying upon their tables, handsomely bound books with superior paper therein, and embossed cards, for the purpose of soliciting from their friends, when they become sufficiently acquainted, either drawings from their pencil, or little pieces either of poetry or of prose composition, and it is found to be a lasting and a pleasing record of friendships formed at every period of their lives; the piece is written and signed with the name of the writer, and dated, and there is no mode by which a friend, whom destiny has taken to another quarter of the globe, can be so easily, so pleasantly brought often before the mind, as by this description of book called an "Album." We have seen many at our friends' houses and have written in them, and in order to keep our kind friends constantly in recollection, when we are in our own country, we have kept an album each,

and we here copy some lines that are written in them, some of which are original, and others copied, in order to shew our countrymen the kind feelings which they entertained towards us.

The following lines are written on the first pages of our Albums :—

Let no false friend within this book,
Dare pen a line, or e'en presume to look;
These are *this Album's* hours, this is its test—
Read, write, or clear it, you know best.

“ ADIEU MY FRIENDS.

**JEHANGHER NOWROJEE,
HIRJEKBHOY MERWANJEE,
DORABJEE MUNCHERJEE.”**

- “ Farewell, it is a pensive word,
“ Yet I must say farewell,—
- “ But if my fervent wish be heard,
“ Thou wilt in safety dwell.
- “ At noon, at night, the throne of grace,
“ I shall approach in prayer,
“ That he who reigns in every place,
“ May make thy life his care.
- “ The hours that we have spent alone,
“ In converse frank and free,
“ Will prove my friends, when thou art gone,
“ A solace sweet to me.
- “ And oft when yon pale star of eve,
“ Shall deck the western sky,
“ My fancy still may yet deceive,
“ And paint thee still as nigh.

" But oh, my friends on England's shore.
 " Hard by the restless main,
 " At noon tide bright or evening hour,
 " When shall we meet again ?
 " That question wakes each tender chord,
 " That in my heart doth dwell,
 " Farewell, it is a pensive word,
 " Yet I must say " Farewell."

" FARE THEE WELL"

HERJEEBHOY MERWANJEE.

" And, is it thus ? must friendship's fire,
 " Just lighted in the breast expire,
 " Must the young blossom, scarcely blown,
 " Wither before the hour of noon !
 " Alas ! and shall we meet no more,
 " On earth, to spend the social hour,
 " To tell alternate hopes and fears,
 " Of all that damps, and all that cheers ?
 " No ! " Fare thee Well."

ON PARTING.

" How painful the hour that compels us to part,
 " With the friends that we cherish, as gems of the heart,
 " But, ah ! more severe when that parting is told,
 " With a voice unimpassioned, an aspect that's cold,
 " When the sigh meets no sigh from an answering breast,
 " When the hand pressing warm vainly sues to be prest ;
 " For then 'tis not absence alone we deplore,
 " But friendship decay'd, and affection no more.

" From the friends that we love, when we wander alone,
 " Our thoughts unrefresh'd, and our feelings unknown,
 " Whilst Hope strives in vain through futurity's gloom,
 " To describe one bright moment in seasons to come,
 " Yet, then, if a sigh be heaved from the breast,
 " If the hand pressing warm in requital be prest,
 " Some soft recollections will still be in store,
 " Though in parting we feel, we may never meet more."

ON "GOOD BYE."

" Thou little word all fraught with sorrow,
 " Thy presence damps each friendly tie,
 " And fond hearts grieve, when 'tis to morrow
 " These joys must end in cold " good bye."

" It tells me Hirjee we must part,
 " These happy hours too swiftly fly,
 " As each new pleasure warms my heart,
 " Thou soon must bid thy friend " good bye."

" How cruel that a word so small,
 " Should so much wretchedness imply,
 " E'en pleasures sink and fortunes fall,
 " When saddened by that word " good bye,"

" Oh ! Hirjee 'tis such pain to part,
 " Methinks 'tis sweeter far to die,
 " Than with an almost breaking heart,
 " To bid a cherished friend " good bye."

" But there is One that reigns above,
 " He at my prayer will still be nigh,
 " To watch and guard the friend I love,
 " Though I alas ! must say " good bye."

" Then fare thee well " forget me not,"
 " But as the lagging hours flit by,
 " Think of that friend, whose varying lot,
 " Compels him now to sigh " good bye."

TO JEHANJEER NOWROJEE.

" There is a soft and pleasing rite,
 " Which India's gentle maidens prove,
 " They down the Ganges send a light,
 " By which to guess their fate in love.

 " How anxiously they watch its ray,
 " Lest storms should cast it on the shore,
 " Or sunken rocks its course betray,
 " Or whirlpools whelm to rise no more.

 " But how they look with keen delight,
 " What soft presages fill the soul,
 " As calmly onwards floats that light,
 " To where the boundless oceans roll.

 " Dear J'angeer may thy lamp of life,
 " Escape the rock and miss the shoal,
 " Pass by the vortices of strife,
 " Nor fail to reach the hoped for goal.

 " But down life's river, may it glide,
 " Henceforth from storm, and sorrow free,
 " And in the end triumphant ride,
 " The oceans of eternity."

TO HIRJEEBHOY MERWANJEE.

" Dear Hirjee you flout at our climate so stern,
 " So uncertain, and chilly you say,
 " And you smile at the thought of an early return,
 " To the bright sunny skies of Bombay.

 " Yet Hirjee remember, tho' rain drops fall fast,
 " Tho' snow-flakes lie thick on the field,
 " That the soil is improv'd, that the winter's soon past,
 " And rich is the harvest they yield.

- “ And such as they type, for should come's my hour,
- “ Then to sorrow, thy heart to sorrow,
- “ May they meet like the snow-flakes, yet feeling expand,
- “ And end in a moment of joy.”

The following were copied into our books:—

- “ When forced to part from those we love,
- “ That seem to meet to-morrow,
- “ We: yet a kind of anguish prove,
- “ And feel a kind of sorrow.

- “ But ah, what words can paint the grief,
- “ When from those friends we sever,
- “ Perhaps to part for days—for years,
- “ Perhaps to part, for ever.”

The annexed excellent and consoling lines
were written by one of our kind friends,

- “ Lines addressed to my friends, Hirjeebhoy,
Jehangeer, and Dorabjee, on their leaving
England, for Bombay, accompanied with best
wishes for their health and prosperity.”

- “ Man's life is but a chequer'd scene,
- “ A round of joy and sorrow,
- “ We view the past, as what has been,
- “ But who foresees the morrow?

- “ Friends of the east, alike to you,
- “ Are providences cast,
- “ May blessings crown life's journey thro',
- “ More blessed than the past.

- " Though short your sojourn in our land,
 " And soon, as friends, we part,
 " Long, long will friendship hold her hand
 " Still cherish'd in the heart.
- " You kindly say ' departure hence,
 " Will cause you pain and grief ! '
 " Then think of *home*—a charm from whence,
 " We *all* obtain relief.
- " God prosper you, where'er you roam,
 " Be with you on the main,
 " Conduct you safely to your *home* !
 " To meet dear friends again.
- " But say not, 'though the mighty main,
 " Our *homes* in time may sever,
 " That we shall *never* meet again,
 " Say rather—*soon for ever* !
- " There is a land of endless joy,
 " Where *sorrows* never dwell,
 " Where friendship lasts without alloy,
 " And *all* shall say, '*tis well*.
- " To that fair land, my valued friends,
 " May we our course pursue,
 " And meeting *there*, when this life ends,
 " A friendship pure, renew."

A CONSOLING REFLECTION.

- " What though on earth we meet no more,
 " And seas our homes may sever,
 " Still let us hope when life is o'er,
 " *To meet in Heaven for ever.*"

FAREWELL.

" Nay shrink not from that word " Farewell,"
 " As if 'twere friendship's final knell ;
 " Such fears may prove but vain :
 " So changeful is life's fleeting day,
 " Where'er we sever, hope to say,
 " We part to meet again.

 " E'en the last parting earth can know,
 " Brings not unutterable woe
 " To souls that heavenward soar,
 " For humble faith, with steadfast eye,
 " Points to a brighter world on high,
 " Where hearts, that here at parting sigh,
 " May meet, to part no more."

REMEMBRANCE.

" When the soft tear steals silently down from the eye.
 " Take no note of its course nor detect the low sigh,
 " From some spring of soft sorrow its origin flows,
 " Some tender remembrance that weeps as it goes.

 " Oh, 'tis not to say what will bring to the mind,
 " The joys that are fled, and the friends left behind,
 " A tune, or a song, or the time of the year,
 " Strikes the key of reflection and moans on the ear.

 " Thro' the gay scenes of youth the remembrance strays,
 " Till memory steps back on past pleasures to gaze,
 " Fleeting shades now they seem that glide silent away,
 " The remains of past hours, and the ghost of each day.

 " Let the tear then drop silent, nor mark the full eye,
 " The soul's secret offering, no mortal should spy,
 " Few souls are prepared for a rite so divine,
 " When the feelings alone sacrifice to the shrine."

As many of our friends were kind enough to permit us to copy any thing we liked from their books, we here indiscriminately annex a few, which will convey to our countrymen, an idea of what other things, besides the kind and feeling expressions of friendship, are written in Albums.

MY NATIVE ISLE.

" Oh, tell me not of fairer lands,
 " Beneath a brighter sky,
 " Of streams that roll o'er golden sands,
 " And flowers that never die.

" My native Isle ! My native Isle !
 " Though bleak and bare thou be,
 " And scant and cold the Summer's smile,
 " Thou'rt all the world to me.

" The flowers that on thy mountain's brow,
 " When Wintry winds assail,
 " Securely sleep beneath the snow,
 " Their cold and kindly veil.

" Transplanted to a richer soil,
 " Where genial breezes play,
 " In sickly gloom we droop awhile,
 " Then wither and decay."

" Women have whims and small requests,
 " That agitate their tender breasts,
 " Tho' we as trifles eye them ;
 " But when their feelings they divulge,
 " With looks they ask us to indulge,
 " Can any man deny them ?"

"Dust is lighter than a feather,
 "And the wind more light than either ;
 "But a woman's fickle mind,
 "Lighter than feather, dust or wind."

"As lamps burn silent with unconscious light,
 "So modest ease in beauty shines most bright ;
 "Unaiming charms with edge resistless fall,
 "And she who meant no mischief does it all."

"In Paradise a woman caused all
 "The ruin of mankind by Adam's fall,
 "What wonder then if they o'ercome us here,
 "When we're more weak, and they perhaps as fair.

"My plan though mock'd by knave, coquet and fool
 "To thinking minds must prove this golden rule,
 "In all pursuits, but chiefly in a wife,
 "Not wealth, but morals mark the happy life."

"On his death bed poor Simon lies,
 "His spouse is in despair,
 "With frequent sobs and mutual sighs,
 "They both express their care.

"A different cause, says parson Sly,
 "The same effect may give,
 "Poor Simon fears that he shall die,
 "His wife, that he may live."

"Between woman and wine, poor man's lot is to smart,
 "For wine makes his head ache, and woman his heart."

" When the tempest of life in a torrent descendeth,
 " And the world like the whirlwind but seeks to destroy,
 " How welcome's the hand that true friendship extendeth,
 " That sweetens the cup and in sorrow gives joy.

" The willow may bend to the blast that is cheerless,
 " Seek safety in stooping its neck to the storm,
 " But a friend like the oak of the forest is fearless,
 " The greater the danger, the nobler the form.

" 'Tis a blessing, a treasure, that has not its fellow,
 " 'Tis the comfort, the solace, of life's thorny hour,
 " The heart that has known it, can feel its full value,
 " A friend with the will, a friend with the power."

" Of mortal blessings here the first is health,
 " And next those charms by which the eye we move.
 " The third is wealth, unsounding, guiltless wealth,
 " And then an intercourse with those we love."

" Beauty's a blessing which soon fades away,
 " But virtue in woman will never decay,
 " If beauty and virtue, in one woman be,
 " If she wants a husband, recommend her to me."

EPITAPHS.

A singular custom prevails in England, that of putting up monuments in churches in memory of dead persons, and of placing upon their monuments in addition to their ages and names, an epitaph as it is called ; some of them are very affecting and pretty, others are quite

ridiculous ; we will copy a few of both sorts.—

In Maidstone church yard, the county town of Kent, is the following :—

" The grave has eloquence, its lectures teach
 " In silence, louder than divines can preach,
 " Hear what it says, ye sons of folly, hear,
 " It speaks to you, lend an attentive ear."

" Here Francis Jarrett, lies! What then?
 " Frank, when his Master calls, will rise again."

ON TWO CHILDREN IN ESSEX.

" Two sweeter babes you never did see,
 " Than God Almighty sent to me,
 " They were surprised by Ague fits,
 " And here they lie as dead as nits."

" Reader, if patience, meekness, faith, and truth,
 " Have charms for age, or influence for youth,
 " Pause on *this* spot, *here* drop one heartfelt tear,
 " *Here* learn to die in hope, or live in holy fear."

" Here lies the man Richard,
 " And Mary his wife,
 " Their surname was Pritchard,
 " They lived without strife ;

" And the reason was plain,
 " They abounded with riches,
 " They no care, had nor pain,
 " And the wife wore the breeches."

Very odd things are sometimes mixed upon tomb stones ; sometimes they represent the living as lamenting the dead, at other times the dead is as it were speaking from the grave. And in Chatham church yard was a stone with this upon it :—" A man had buried two wives," after stating the name and age of the first, was the following :—" The Lord gave, and the Lord hath taken away, blessed be the name of the Lord." In a few years his second wife died, and following her name and age—was " I called upon the Lord and he heard me, and delivered me out of all my troubles."

" Forgive blest shade the tributary tear,
 " That mourns thy exit from a world like this ;
 " Forgive the wish that would have kept thee here,
 " And stay'd thy progress to the seats of bliss.

" No more confined to grov'ling scenes of night,
 " No more a tenant pent in mortal clay,—
 " Now should we rather hail thy glorious flight,
 " And trace thy journey to the realms of day."

" Here lies the body of Sarah Sexton,
 " Who as a wife did never vex one,
 " We can't say that for her at the next stone."

We shall conclude our little collection of
 epitaphs with one we think the best.

" Praises on tombs are trifles vainly spent,
 " A man's good name is his best monument."

CHAPTER XXXIV.

CLIMATE OF ENGLAND.

Some of the Customs of England, of every day's occurrence, appeared to us very odd ; when two intimate friends meet in the street (particularly in the country) they say to each other without stopping, but nodding to each other, " How do !" " how do you do," " pretty well," " fine day," " looks like rain," " good bye," " good bye." This we saw repeated constantly, very much to our amusement, with, of course, the variation of " very warm," " quite oppressive," or " very gloomy," all these remarks of course are brought about by the variableness of the climate, and it is indeed perpetually changing.

There are twelve months in the English year, January is the first, and is usually the coldest in the year, so cold that water is frozen ; all the inland rivers are frequently blocked, and ice is formed of such thickness, that in 1814 the river Thames was so thickly covered with ice that a fair was held on it, and thousands of persons were to be seen amusing themselves

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on what is usually water. So firm and thick was the ice that fires were lighted and a bullock roasted whole; a printing press was set in operation on the ice, and several witty things were printed.

In January, usually, the ground is covered with snow. In January, 1841, we saw it very many inches deep, completely changing the appearance of the country; and oh! how beautifully white it makes every place; when the sun, which in England in that month has not much power, shines upon it, nothing we can say can convey an idea of its dazzling brightness, no collection of precious stones are to be compared with it; but then, how cold it is,—even by the side of a large fire made from coals, you cannot keep warm: when you pop your head out of doors, the nose, the toes, and the fingers soon make you feel that it is indeed severe. There are animals in England furnished by their Maker with the power of being torpid or inanimate in severe cold weather; frogs and snakes continue for weeks as if dead; dormice, squirrels, and field-mice are also gifted with this happy quality.

February, the second month, also has much of cold, but towards the end of the month the sun has more power, and there are some cheering days, but usually much rain and snow falls in this month of the year.

March, the third month, is usually dry, but it has generally cold, severe, piercing, winds painful even to natives of this variable climate, but to us,

accustomed to perpetual warm weather, quite distressing; still March has its pleasures. All the hedges and trees that during the cold weather have been without leaves, now begin to assume a greenness, the buds in which the future branch is in miniature, and has been asleep, is now pushing forth; the fields begin to look green, flowers are to be seen peeping forth, and it is singular that nearly all the earliest of English flowers are yellow; we never could learn why. All the farmers are busy; this is their grand time of sowing their seeds; some sorts of wheat, beans, peas, rye, oats, and barley, are now sown. In March also the wall fruit, peaches, and apricots, blow in the gardens.

April, the fourth month, has weather most variable; in this month the cherry and apple trees bloom, and the fragrance and beauty of a large assemblage of these trees, in the month of April, is most pleasing. Cherries and apples are grown most extensively in the county of Kent. A gentleman, named Barling, near Sittingbourne, has, we are told, nearly eighty acres, all close together, of the best sorts of apples, pears, and cherries. April, however, is an unsafe month to travel in, without being prepared for rain, as it is one hour sunshine and then heavy rain, and again in a few minutes, the beautiful cheering sun bursts forth in his glory and gladdens all things. All the fields now are covered with flowers, and the

sides of the hedges and woods have beautiful flowers. To us who live in a perpetual summer, these appearances would be as nothing; but to those who dwell in England, where for several months every year the trees are leafless, and the fields destitute of verdure, when nothing is seen but the bare earth for a long period; it is a season of joy and thankfulness to see all things vegetating, and to behold every field green, and every tree looking beautiful in its new leafy clothing.

May is the month when a most gaudy and variegated showy flower that is cultivated very extensively in England is in bloom, and perhaps no more beautiful sight can be witnessed than a bed of first rate expensive tulips; they are bulbous roots, and are planted in the month of November, in long beds of prepared earth, seven in each row, four inches deep, and full seven inches apart; the length of the bed depends upon the size of the garden. Our friend's bed consisted of sixty rows, making four hundred and twenty roots; and just before they come into bloom, a canvas roof is built over the bed, to protect the flowers from the rain and the powerful rays of the sun; the flowers are about two feet from the ground, and consist of eight petals, and they are of every diversity of colour. The three grand distinctions are Bibloemen's purple upon white ground, Rose's which have red and pinkish stripes upon white ground, and Bizarre's which have

yellow ground, with brownish or black stripes. It is the variety and distinctness of these stripes which render them valuable. And there is every possible tint and hue of the above-named colours that can be mixed together. A tulip bed of first rate good flowers is very valuable; several of the roots being ten pounds each, very many five pounds each, and the others varying from five pounds to five shillings per root.

May is the fifth month, and is usually considered the most beautiful month in the year in England. The weather is most settled; and although not hot there is a warmth and comfort in the state of the temperature. The hawthorn hedges are full of a beautiful assemblage of sweet-scented bloom, which quite perfumes the air. The horse chesnut tree is in bloom, with its large white flowers, and everything looks blithe and cheerful.

June, the sixth month, is also a fine month, with increased warmth. This is the season when the grass is cut and made into hay, and the wool is sheared from the sheep's back in this month; and in walking in the country the perfume from the fields of beans is most delightful, as also the clover fields. In June, that beautiful fruit, the cherry, is ripe; and is so abundant and cheap, being, in 1840, only a penny per pound, that every person is enabled to partake largely of this fleshy, firm, and delicious stone fruit. Cherries

are about the size of a betel nut, and are a most refreshing beautiful fruit.

July the seventh month is usually a fine month with increasing warmth. This month is the great fruit month. Raspberries, gooseberries, and currants, are quite ripe, and are to be met with in abundance, and very cheap.

August the eighth month is the hottest month usually, in England. In this month, the harvest, or gathering in of the corn, is the occupation of immense numbers of people. The wheat, barley, and oats are now reaped with a sickle, and bound up in bundles, and drawn in waggons to the barn to be thrashed out. And hops, which are used to make beer, are gathered in this month and dried for that purpose.

September the ninth month. All the apples and pears are by this time ripe and fit to be gathered. Apples are a most valuable fruit; they are a grateful flavour to eat, and many sorts will keep good for six months. A friend of ours, whose birth-day is the fifth of June, usually keeps apples until that time. Cider, a very nice drink, is made from the juice of apples, and is bottled, and becomes effervescing, and is almost as good as champagne, if made from choice fruit. Perry is made from the juice of pears, and is also beautiful to drink.

October the tenth month begins to shew ap-

pearance of change ; the days shorten, rough cold winds blow, and the leaves on the trees begin to look yellow. This is a busy month with the farmer ; he ploughs his land, and sows great part of his wheat ; there are no flowers in the fields ; the hedges look bare, and then comes

November, the eleventh month, cold, damp, foggy, and miserable. All the trees become bare, the weather becomes cold, and the spirits are depressed, and this brings

December, the twelfth and last month. Frosts and snow like what we described in January now prevail, but there is a clearer atmosphere usually in December than in November. The frosts harden the ground so that one can walk pleasantly ; and in December is Christmas, the season of festivity among Christians, being the birth-time of Jesus Christ. There is great rejoicing ; great and cheerful parties are made at each other's houses. On Christmas-day, all the members of families contrive to come from distances of many miles to meet and dine at their father's house, and Christmas makes all hearts merry.

We here wish to inform our countrymen that the climate of England, though very cold, is not unhealthy, because we kept our healths, generally speaking, very good indeed, and by taking proper care of ourselves, we escaped the rigour and severity of the winter.

On account of the cold and the frequent changes of weather, it is necessary to wear flannel next the skin, in order to keep the body warm and of an uniform temperature. Great care ought to be taken in keeping the feet warm, and never putting on clothes which are the least damp, because that is liable to give a severe cold in winter.

There are many precautions necessary in England with regard to the climate, which our space will not allow us to enumerate, but we shall mention a few which would be useful to any of our countrymen visiting England. In winter, be careful not to put on damp shoes, never get unnecessarily wet, avoid going out in the evening as much as possible. When you go out in cold weather, put on as much clothing as would keep you warm; take plenty of exercise, even in very severe weather (provided it is dry). Never stand in open air after a long walk, or after you have perspired. Do not sit with a window or a door open, or where there is a draught of air. Never go out of a warm room into open air, or to a cold place without some additional clothing. By following these suggestions, and by adopting a judicious and moderate plan of living, we think that a stranger will keep his health very good, and consequently will enjoy all the pleasures of his travels.

CHAPTER XXXV.

CONCLUDING OBSERVATIONS.

It is now necessary, as the period draws near for us to bid a final adieu and farewell to England, and to return to our ever dear and happy home, Bombay, that we should take leave of our readers. First, then, we would address our own countrymen, as it is for *them* that we have compiled this little volume, and we would say to our brethren in the east, who have leisure and money, by all means pay a visit to England. Amply, most amply will they be repaid for the expenditure of their time and a portion of their fortune. They will see that England is a mighty country, containing within herself all the elements of a mighty people: that she has mineral productions of coal, iron, copper, tin, and several sorts of stone, that enable her children to take a prominent position as a manufacturing people, and that no nation of the present day can compete with her in her manufactures: that her machinery is of the most perfect description, and that by it she produces every

material, from the finest lace to the largest cable, that her cutlery and other instruments are unrivalled both for their workmanship and for the materials of which they are made: that her glass is as pure and beautifully cut as it is possible for such an article to be made: that her woollen cloths for fineness of texture, brightness of colour, and for durability are not to be matched any where. That her linen and cotton surpass those manufactured in any other part of the globe, that her silks are now nearly equal to those of any other kingdom, and her institutions are the greatest object of admiration to all the nations on the face of the earth.

Our readers will very naturally ask, why is it that this little speck on the map of the world should thus become unrivalled. Why cannot France, containing in population double that of England, compete with her? why not the mighty continent of America? why not the other European nations? We will answer this question in a very few words. There is a great deal of private enterprise among the English people, they are all of one mind, and all working to one end—viz. the adopting of such measures as will promote their happiness and welfare. Almost all the institutions, educational, scientific, and charitable, belong to private associations and companies, receiving but little support and many none at all from Government; we have elsewhere described the bridges, railroads

and other public conveyances which have been constructed by private individuals. Banks, asylums, &c. are private property, and to effect all these they unite together in large numbers, by which means wealth, talent and influence are concentrated into one point, this leads them to the establishment of great national works subservient to public good. This system is decidedly mischievous when carried out for the formation of projects, which individual wealth is capable of effecting, as it tends to check and discourage individual enterprise, but for works such as railroads, bridges, banks and other institutions, it is admirably calculated, as these are beyond individual power to effect. To this in a great measure in conjunction with the colonial possessions and maritime enterprise may be attributed the greatness of England and by this public feeling, and union of sentiment among themselves the English have now arrived at such national prosperity as to excite the admiration of the world.

To give an idea of the activity and fondness of public business that so pre-eminently distinguishes the English character from that of their European neighbours, we may mention that we became acquainted with a commercial gentleman, whose enterprising spirit had led him almost unaided to form not less than five great companies, all of unquestionable utility to the country, viz. three banks, one gas light and one railway company, this same gentleman was likewise a magis-

trate, a governor of two or three public institutions, a considerable money dealer, and the head of a family of fourteen children, so that he must have employed the whole period of his life with unremitting attention to these things, thus sacrificing with a noble and exalted patriotic feeling, his private comforts for the good of his country and his fellow-brethren. To this we repeat is to be attributed their great superiority of wealth and power, considering their amount of population as compared with other countries

Nothing can thus more strikingly evince the difference in *the effect* upon a nation's prosperity, where in the one case it emanates from the people, and in the other from the government. As no government however wealthy can possibly support the endless variety of useful institutions that are to be seen in England.

We have been insensibly led into digression, but now hasten to bring our observations to a close. In the spring of the year, English scenery with its greenness and its freshness, with the trees in bloom and those bearing their fruit, is like a perpetual garden of flowers, and the corn fields of wheat, barley, oats, rye, peas, beans, &c. each in their respective seasons, present various pictures of great beauty, and we pronounce England, as a whole, well worth the trouble of coming all the way from India to see. Our countrymen must not think that we have given anything like a full

description of England ; we came over with a specific object in view, and it was only whilst relaxing from the study of our business that we were able to see the things we have mentioned, and to make our remarks upon them.

So far as we have given descriptions, we have endeavoured to obtain the best information we could gain upon the several subjects, and we are inclined to hope our statements are generally correct ; still great allowances must be made for our being strangers ; we have not perhaps in many instances been able to obtain full information upon all the points we could have wished, but if every one visiting England would take the trouble, if they have leisure, to put down every day their remarks upon the manners, customs, and everything that they see in England, we are sure it would amply repay them, and enlighten their countrymen by given publicity to the whole at the end of their sojourn in the country.

It may happen that our little work may be read by some of the English people ; we request them not to judge too harshly of our production, as, being sensible of the want of our intimate acquaintance with the English language, we did not originally intend to print our remarks in this country, but having been repeatedly urged and encouraged by some of our kind friends to do so, we at length consented. We have received much kindness, much polite attention, and much real friendship

from both ladies and gentlemen in England ; with some we have formed friendships which we hope will only terminate with our lives, and we shall always recollect England with sentiments of esteem and admiration, and we shall ever think of that portion of our lives spent on her shores with feelings of much pleasure and gratification. And now in bidding adieu to her and the English people, we would say to them,—be united,—remember the old English fable of the boy with the bundle of sticks,—and also the good old English proverb —“ Union of sentiment is the strength of society” —united, you may bid defiance to the world, but if disunited, any force however small may weaken and destroy you.—Farewell.

FINIS.

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